2M® TECHNOLOGY

Designed for Life

CCTV Product Catalog 2014

2M Technology Inc. is a leading provider of low voltage audio video and security solutions to the homeland security, institutional and commercial market segments.

2M offers its products and services through local, regional, and national system integrators and distributors in North and South America. 2M Technology operates its corporate office center in Dallas, Texas; 2M Technology engineering ability helped rapidly and effectively exceeding customers expectation in terms of use, design, delivery and price.

2M Technology has a team of professionals who are specialized in supporting professional security integrators in their design and decision of low voltage products. 2M Technology innovation have promoted 2M Technology products to design and develop products that are extremely competitive without any loss of quality.

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IP Products

Real Life in HD

Eco Series
1.3 Megapixel / 3 Megapixel

Features

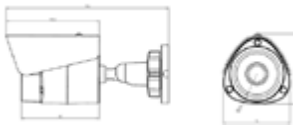
- High-performance TI DaVinci series DSP
- H.264 video compression and JPEG image capture
- Dual encoding streams supported
- Support Alarm I/O, RS485
- Max 32GB Hot-swappable SD card for local storage
- Free CMS, free mobile phone APPs
- IP66
- IK10

Specifications

MODEL	2MBIP-1.3IR30E	2MBIP-3IR30E	2MBIP-1.3AR2E	2MBIP-3AR2E	2MVIP-1.3IR30E	2MVIP-3IR30E	2MVIP-1.3AR2E	2MVIP-3AR2E	2MBIP-1.3IR30L212E	2MBIP-30IR30L212E	2MVIP-1.3IR30L212E	2MVIP-30IR30L212E
GENERAL												
Image Sensor	1/3" Progressive Scan CMOS											
Min Illumination	0.01Lux @ (F1.2, AGC ON) ,0 Lux with IR	0.07Lux @ (F1.2, AGC ON) ,0 Lux with IR	0.01Lux @ (F1.2, AGC ON) ,0 Lux with IR	0.07Lux @ (F1.2, AGC ON) ,0 Lux with IR	0.01Lux @ (F1.2, AGC ON) ,0 Lux with IR	0.07Lux @ (F1.2, AGC ON) ,0 Lux with IR	0.01Lux @ (F1.2, AGC ON) ,0 Lux with IR	0.07Lux @ (F1.2, AGC ON) ,0 Lux with IR	0.01 Lux @(F1.2,AGC ON), 0 Lux with IR 0.014 Lux @ (F1.4,AGC ON), 0 Lux with IR	0.07Lux @(F1.2,AGC ON) ,0 Lux with IR 0.1Lux @(F1.4,AGC ON), 0 Lux with IR	0.01 Lux @(F1.2,AGC ON), 0 Lux with IR 0.014 Lux @ (F1.4,AGC ON), 0 Lux with IR	0.07Lux @(F1.2,AGC ON) ,0 Lux with IR 0.1Lux @(F1.4,AGC ON), 0 Lux with IR
Shutter Speed	1/25 s to 1/100,000 s											
Lens	4mm@ F2.0, Angle of view: 69.4°(6mm, 12mm optional)	6mm@ F2.0, Angle of view: 75.8°(4mm, 12mm optional)			2.8mm@ F2.0, Angle of View	4mm@ F2.0, Angle of view: 69.4°(6mm, 12mm optional)	4mm@ F2.0, Angle of view: 69.4°(2.8mm, 6mm, 12mm optional)		2.8 - 12 mm @ F1.4,Angle of view: 80°-28.7°(4mm, 6mm, 8mm, 12mm fixed lens optional)			
Lens Mount	M12								14			
Day &Night	IR cut filter with auto switch											
Digital Noise Reduction	3D DNR											
Wide Dynamic Range	Digital WDR											
Angle Adjustment	N/A				Pan:0° - 355°, Tilt: 0° - 65°		Pan:0° - 360°, Tilt: 0° - 75°, Rotation: 0° - 360°		N/A		Pan:0° - 355°, Tilt: 0° - 75°, Rotation: 0° - 355°	
COMPRESSION STANDARD												
Video Compression	H.264/ MJPEG											
H.264 Type	N/A				Main Profile							
Video Bit Rate	32 Kbps – 16 Mbps											
Audio Compression	N/A								G.711/G.726			
Audio Bit Rate	N/A								64Kbps(G.711) / 16Kbps(G.726)			
Dual Stream	Yes											
IMAGE												
Max. Resolution	1280 x 960	2048×1536	1280 x 960	2048×1536	1280 x 960	2048×1536	1280 x 960	2048×1536	1280 x 960	2048×1536	1280 x 960	2048×1536
Frame Rate	50 Hz: 25 fps (1280 × 960), 25 fps (1280 x 720) 60 Hz: 30 fps (1280 × 960), 30 fps (1280 x 720)											
Backlight compensation	Saturation, Brightness, Contrast adjustable by client software or web browser											
Settings	Yes, zone optional											
NETWORK												
Network Storage	NAS (iSCSI optional)											
Alarm Trigger	Motion detection, Tampering alarm, Network disconnect, IP address conflict, Storage full , Storage error											
Protocols	TCP/IP, HTTP, DHCP, DNS, DDNS, RTP, RTSP, PPPoE, SMTP, NTP, UPnP, ICMP,IGMP,SNMP, FTP, 802.1X, QoS, HTTPS (SIP,SRTP,IPv6 optional)											
Security	User Authentication, Watermark											
Standard	ONVIF, PSIA, CGI											
INTERFACE												
Communication Interface	1 RJ45 10M/100M Ethernet interface											
Reset Button	Yes		N/A									
On-board storage									Built-in Micro SD/SDHC/SDXC card slot, up to 64 GB			
Audio I/O									1 channel (two way audio)			
Alarm I/O									1 channel			
GENERAL												
Operating Conditions	-30 °C – 60 °C (-22 °F – 140 °F)Humidity 95% or less (non-condensing)											
Power Supply	12 V DC ± 10%PoE (802.3af)											
Power Consumption	Max. 5 W (Max. 7 W with IR cut filter on)		Max. 7 W (Max. 9 W with IR cut filter on)		Max. 5 W (Max. 7 W with IR cut filter on)		Max. 5.5 W (Max. 7.5 W with IR cut filter on)				Max. 5.5 W	
Ingress Protection level	IP66											
IR Range	Approx. 20 to 30 meters		Approx. 50 meters		Approx. 10 to 30 meters		Approx. 20 to 30 meters		N/A		Approx. 20 meters	
EXIR Range	N/A								Approx. 30 meters		N/A	
Impact Protection	N/A				IEC60068-2-75Eh, 50J; EN50102, up to IK10		N/A				IEC60068-2-75Eh, 50J; EN50102, up to IK10	
Dimensions	60.4×76.9×139.28 mm (2.4" × 3.0" × 5.5")		105×104.8×263.1mm (4.13" × 4.13" × 10.38")		111 × 82 (4.4" × 3.2")		127×97.5 (5.0" × 3.8")		95×105×258.6 mm (3.74" × 4.13" × 10.18")		140 × 99.9 mm (5.51" × 3.94")	
Weight	500g (1.1 lbs)		700g (1.5 lbs)		500g (1.1 lbs)		670g (1.5 lbs)		1200g		1000g	

- 2MBIP-1.3IR30E

Dimensions

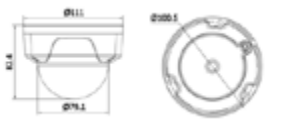


- 2MBIP-1.3IR30E

Dimensions

- 2MBIP-1.3IR30E

Dimensions

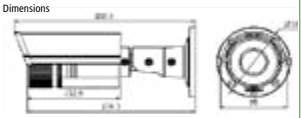


- 2MBIP-1.3IR30E

Dimensions

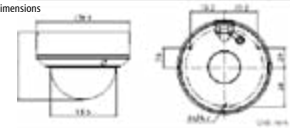
- 2MBIP-1.3IR30E

Dimensions



- 2MBIP-1.3IR30E

Dimensions



1.3 Indoor Fish Eye IP Camera

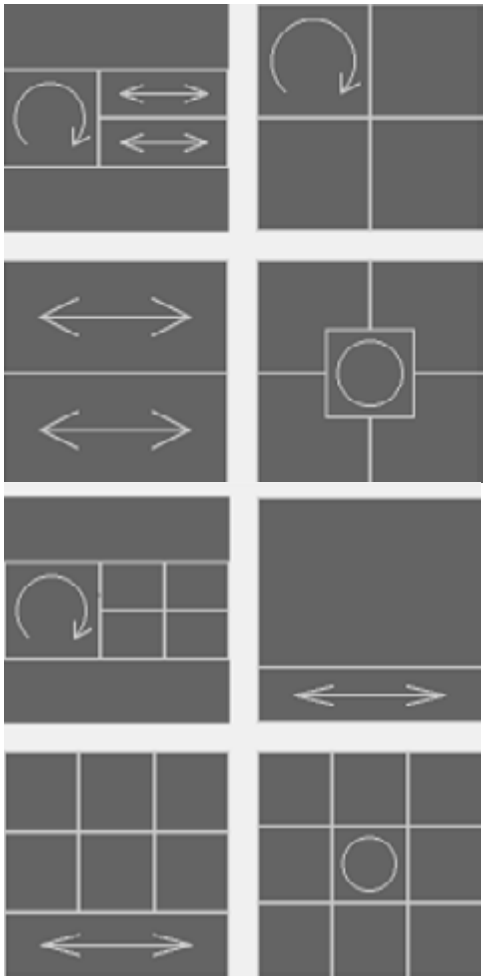
Features

- 1.3MP (1280x960) resolution
- 360/180 degrees panorama view and quad view
- Virtual PTZ;
- Built-in Microphone, IR LEDs(Black model);
- SD card for local recording;
- Optional WiFi/PoE;
- Support 3 installation modes, i.e. ceiling-mount, wallmount and desktop.
- Support 8 popular de-warping display options

Specifications

MODEL	**2M-FE011**	**2M-FE010 (W)**	**2M-FE010 (B)**	**2MFEV-1.3**
GENERAL				
Lens	Fish-eye lens, f=1.16mm, F=2.0			
Field of View	Horizontal 182°			
Iris	Fixed			
Sensor	1/3" Progressive Scan CMOS			
Resolution	1.3MP			
Min. Illumination	0.15Lux@F2.0(Color)/0.015Lux@F2.0(B/W); 0Lux (IR On)		0Lux (IR On)	0.15Lux@F2.0(Color)/0.015Lux@ F2.0(B/W); 0Lux (IR On)
IR LEDs	N/A		IR LEDs with max 10m IR distance	Omni Direction 3W @850nm>
IMAGE				
Image Flip	Horizontal/Vertical			
Image Adjust	Brightness, Saturation, Sharpness, Contrast, Tone			
Max Resolution	1.3 Megapixels (1280×1024)			
Video Coding	H.264 Dual-stream			
Video bitrate	100Kbps~6Mbps			
Max frame-rate	25fps/30fps			
AUDIO				
Microphone	Internal	N/A		
Audio Coding	G.711	N/A		
Pickup Distance	6m	N/A		
PANORAMA FUNCTION				
Panorama Display	360° panoramic expanded display, 180° two-screen display, 90° quarter-screen display, the latitude and longitude corrected (Wall mounted)			360° panoramic expansion-view,180° 2 split-view, 90° 4 split-view
Digital PTZ	Support			
Motion Detection	20×15 Regional detecting, Sensibility 1~6 adjustable			
ALARM FUNCTION				
Alarm Trigger	Motion Detection/Video Mask/Exception/ Alarm Input			
Alarm Action	Alarm Recording / image capture, alarm video / image upload (FTP / EMAIL)			
NETWORK				
Protocol	TCP/IP, HTTP, DHCP, DNS, RTP/RTSP, FTP, PPPOE, SMTP, NTP			
ONVIF	ONVIF 2.0			
Wi-Fi	N/A	Optional, IEEE802.11b/g/n		N/A
INTERFACE				
Communicate port	1 ch 4pin port(10M/100M Ethernet)	1 port RJ45 10M/100M Base-T		1 ch 4pin port(10M/100M Ethernet)
Power Interface	12V Terminal	N/A		5.5-2.1mm DC Socket
Local storage	Up to 128G Micro SD Card tput			N/A
ENVIRONMENTAL				
Power Supply	DC12V/AC24V, PoE(-E model)			
Power Consumption	<6W			<10W
Operating Environment	-15℃~+50℃, Humidity 10%~95% noncondensing			-30℃~+65℃, humidity 10%~ 95%
Electromagnetic Compatibility	CE, FCC			
Housing	PC White	PC White	PC Black	Aluminum-alloy housing and PMMA dome
Protection Class	IP50			Outdoor IP66 Lightening Protection Anti surge
Product Size	100×36.6mm	148mm×53mm		148×178mm
Weight	N.W. : 0.5 Kgs	N.W.: 0.5/ G.W.:1 (kg)		G.W: 1.2kg/N.W: 0.9kg

• Support 8 popular de-warping display options



2 Megapixel Series

Features

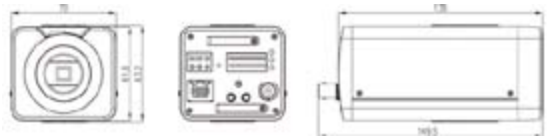
- High-performance TI DaVinci series DSP
- H.264 video compression and JPEG image capture
- Dual encoding streams supported
- Support Alarm I/O, RS485
- Max 32GB Hot-swappable SD card for local storage
- Free CMS, free mobile phone APPs
- IP66
- IK10

Specifications

MODEL	2MSIP-2 2MSIP-2W (Wi-Fi)	2MB-2IR36L312 2MB-2IR36L312Z (Motorized Lens)	2MVIP-2IR36L39	2MVIP-2IR36L39Z	2MDIP-M2
GENERAL					
Processor	TI DaVinci Series DSP				
Operating System	Embedded LINUX				
Resource	Simultaneous remote monitoring, local recording and remote control				
User Interface	WEB, CMS(DSS/ PSS), DMSS, NVR				
CAMERA					
Image Sensor	1/3" 2Megapixel Exmor CMOS				
Effective Pixels	1920(H)x1080(V)				
Scanning System	N/A	Progressive			
Electronic Shutter	PAL: Auto/Manual, 1/3～1/10000s NTSC: Auto/Manual, 1/4～1/10000s				
Min Illumination	Color: 0. 1LUX/F1.2, B/W: 0.01LUX/F1.2	0.1Lux/F1.2 (Color), 0.01Lux/ F1.2(B/W);0Lux/F1.2(IR on)	Color: 0. 1Lux/F1.2, B/W: 0.01Lux/F1.2	Color: 0. 1Lux/F1.2, B/W: 0.01Lux/F1.2; 0Lux/ F1.2(IR on)	0.01lux/F1.2(color)
Signal Noise Ratio	＞50dB				
Gain Control	Auto/Manual				
White Balance	Auto/Manual		Auto		Auto/Manual
Day/Night	ICR	Auto(ICR)/Color/B/W			Auto(Electronic)/Color/B/W
Max. IR LEDs Length	N/A	30m	N/A	20m	N/A
Backlight Compensation	N/A	BLC / HLC / DWDR			
Noise Reduction	N/A	3D	2D		3D
Privacy Masking	N/A	Up to 4 areas			
Lens					
Focal Length / Max Aperture	N/A	3.3 ～12mm / F1.4	2.7～12mm	3～9mm	3.6mm (2.8mm,6mm) / F1.8
Angle of View	N/A	H: 87.5° ～ 31.1°	H: 87.5° ～ 45°	H: 87.5° ～ 45°	H:70°(97.24°/46°)
Lens Type	Support Auto Iris	Manual/Auto Iris(DC)	Auto Iris Varifocal	Motorized	N/A
VIDEO					
Compression	H.264/MJPEG				
Image Resolution	PAL: 1080P(1920×1080) /720P(1280×720) / D1(704×576) / CIF(352×288) NTSC: 1080P/720P(1～30fps) + D1(1～30fps)				
Encoding Speed	PAL: 1080P/720P(1～25fps) + D1(1～25fps) NTSC: 1080P/720P(1～30fps) + D1(1～30fps)				
Bit Rate	160K～8Mbps	H.264: 32K ～ 8192Kbps	H.264: 32K ～ 8192Kbps, MJPEG: 32K ～ 20480Kbps		H.264: 32K ～ 8192Kbps
Video Format	NTSC / PAL				
Analog Video Output	1 channel BNC(1.0Vp-p, 75ohm)				N/A
AUDIO					
Audio Compression (Bit Rate)	G.711a / G.711u / PCM (128kbps/64Kbps/10.2Kbps)				N/A
Input/Output	1 channel 3.5mm JACK LINE IN / 1 channel 3.5mm JACK SPEAK OUT				N/A
NETWORK					
Ethernet	RJ-45 (10/100Base-T)				
Network Functions	HTTP, TCP/IP, ICMP, RTSP, RTP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPOE, DDNS, FTP, , Alarm Server	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter, QoS, Bonjour,			
Remote Operation	Monitor, PTZ control, Playback, System setting, File download, Log information, Maintenance & Upgrade	N/A			
ONVIF	N/A	ONVIF Profile S	ONVIF Ver 2.0		ONVIF Profile S
Max Users	N/A	20 Users	10 Users		20 Users
AUXILIARY INTERFACE					
SD Card	Micro SD, Max 32GB				
RS232 / RS485	PC communication / PTZ Control	N/A	N/A	N/A	N/A
Alarm	1 Input / 1 Output	2 Input / 1 Output	1 Input / 1 Output		N/A
ENVIRONMENTAL					
Power Supply	DC12V/AC24V, PoE	DC12V (AC 24V optional), PoE (802.3af)	DC12V/AC24V, PoE(802.3af)		DC12V, PoE (802.3af)
Power Consumption	＜6W	＜7.5W	＜10W		＜3W
Operating Environment	-10°C～+60°C, 10%～90%	-20°C～+60°C (-H: -40°C～+60°C) , Less than 95% RH	-10°C～+60°C, 10%～90%		-20°C～+60°C, Less than 95% RH
Dimensions	70mm x 63.2mm x 149.5mm	104mm x 306.7	151mm x 119mm		110mm x 54mm
Weight	650g	1.25Kg	1.1Kg	1.25Kg	250g

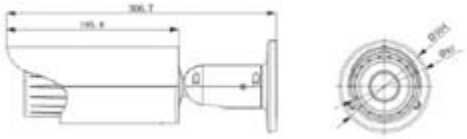
• 2MSIP-2 / 2MSIP-2W

Dimensions



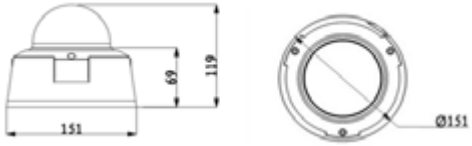
• 2MB-2IR36L312 / 2MB-2IR36L312Z

Dimensions



• 2MVIP-2IR36L39

Dimensions



• 2MDIP-M2

Dimensions

Recommended Accessories

Housing

IR Housing

200W

Housing Bracket

3 Megapixel Series
5 Megapixel Camera

Features

- High-performance TI DaVinci series DSP
- H.264 video compression and JPEG image capture
- Dual encoding streams supported
- Support Alarm I/O, RS485
- Max 32GB Hot-swappable SD card for local storage
- Free CMS, free mobile phone APPs

Specifications

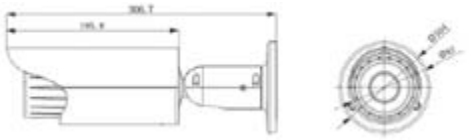
MODEL	2MSIP-3	2MBIP-3IR36L312	2MVIP-3L312	2MVIP-3IR36L312	2MDIP-M3	5MP SERIES
	2MSIP-3WDW (Wi-Fi)	2MBIP-3IR36L39Z (Motorized Lens)		2MVIP-3IR36L312Z (Motorized Lens)		2MSIP-5 2MSIP-5W (WiFi)
	2MSIP-3W (WDR)	2MBIP-3IR36L312WD (WDR)	2MVIP-3L31Z (Motorized Lens)	2MVIP-3IR36L312WD (WDR		
GENERAL						
Processor	TI DaVinci Series DSP					
Operating System	Embedded LINUX					
Resource	Simultaneous remote monitoring, local recording and remote control					
User Interface	WEB, CMS(DSS/ PSS), DMSS, NVR					
CAMERA						
Image Sensor	1/3" 3Megapixel Aptina CMOS					1/2.5" 5.0 Megapixel Aptina CMOS
Effective Pixels	2048(H)x1536(V)					2592(H)×1944(V)
Scanning System	N/A	Progressive				N/A
Electronic Shutter	PAL: Auto/Manual, 1/25～1/10000s NTSC: Auto/Manual, 1/30～1/10000s					PAL: Auto/Manual, 1/3～1/10000s NTSC: Auto/Manual, 1/4～1/10000s
Min Illumination	0.2LUX/F1.2(Color), 0.01LUX/F1.2(B/W)	0.2LUX/F1.4(Color), 0.01LUX/F1.4(B/W), 0Lux(IR ON)	Color: 0. 1Lux/F1.2, B/W: 0.01Lux/F1.2;	Color: 0. 1Lux/F1.2, B/W: 0.01Lux/F1.2; 0Lux/F1.2(IR on)	0.01lux/F1.2(color)	0.6LUX/F1.2(Color), 0.08LUX/F1.2(B/W)
Signal Noise Ratio	>50dB					
Gain Control	Auto/Manual					
White Balance	Auto/Manual		Auto		Auto/Manual	
Day/Night	ICR	Auto(ICR)/Color/B/W			Auto/Color/B/W	ICR
Max. IR LEDs Length	N/A	20m	N/A	20m	N/A	
Backlight Compensation	N/A	N/A	BLC / HLC / DWDR	BLC / HLC / DWDR	N/A	
Noise Reduction	N/A	N/A	3D	3D	3D	N/A
Privacy Masking	N/A	N/A	Up to 4 areas			N/A
LENS						
Focal Length / Max Aperture	N/A	3.3-12mm / F1.4	2.7 -12mm / F1.4		3.6mm (2.8mm,6mm) / F1.8	N/A
			3 -9mm (Motorized) / F1.2			
Focus Control	N/A	N/A	Manual		N/A	
			Auto (Motorized)			
Angle of View	N/A		H: 93.2°(Wide)～25.5°(Tele)		H:70°(97.24°/46°)	N/A
			H: 105°(Wide)～36°(Tele (Motorized)			
Lens Type	Support Auto Iris	Auto Iris	Manual /Auto Iris(DC)		Fixed	Support Auto Iris
			Motorized /Auto Iris(DC)			
VIDEO						
Compression	H.264/MJPEG					
Image Resolution	PAL: 3.0M(2048×1536) / 1080P(1920×1080) / 720P(1280×720) / D1(704×576) / CIF(352×288) / VGA(640×480) NTSC: 3.0M(2048×1536) / 1080P(1920×1080) / 720P(1280×720) / D1(704×480) / CIF(352×240) / VGA(640×480)					5M(2560×1920) / 3M(2048×1536) / 720P(1280×720) / D1(704×576/704×480) 1080P(1920×1080) /
Encoding Speed	PAL: Main Stream: 3.0M(1～20fps), 1080P/720P/ D1/CIF/ VGA(1～25fps) Extra Stream: D1/CIF (1～25fps) NTSC: Main Stream: 3.0M(1～20fps), 1080P/720P/ D1/CIF/ VGA(1～30fps) Extra Stream: D1/CIF (1～30fps)					PAL: 5M(1～8fps) + D1(1～25fps) 3M(1～15fps) + D1(1～25fps) NTSC: 5M(1～8fps) + D1(1～30fps) 3M(1～15fps) + D1(1～30fps) 1080108010800P/720P(1～30fps) + D1(1～30fps) 1080P/720P(1～30fps) + D1(1～30fps) 1080P/720P(1～25fps) + D1(1～25fps)
Bit Rate	160K～8Mbps	H.264: 32K ～ 8192Kbps				160K～8Mbps
Analog Video Output	1 channel BNC(1.0Vp-p, 75ohm)					
AUDIO						
Audio Compression	G.711a / G.711u / PCM (128kbps/64Kbps/10.2Kbps)				N/A	G.711a / G.711u / PCM (128kbps/64Kbps/10.2Kbps)
Input/Output	1 channel 3.5mm JACK LINE IN / 1 channel 3.5mm JACK SPEAK OUT				N/A	1 channel 3.5mm JACK LINE IN / 1 channel 3.5mm JACK SPEAK OUT
NETWORK						
Ethernet	RJ-45 (10/100Base-T)					
Network Functions	HTTP, TCP/IP, ICMP, RTSP, RTP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPOE, DDNS, FTP, , Alarm Server	HTTP,TCP/IP,ARP,IGMP ,ICMP,RTSP,RTP,UDP,RTCP ,SMTP,FTP,DHCP,DNS,DD NS,PPPOE,UPNP,NTP,Bo njour,SNMP	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter, QoS, Bonjour			
Remote Operation	Monitor, PTZ control, Playback, System setting, File download, Log information, Maintenance & Upgrade		N/A			Monitor, PTZ control, Playback, System setting, File download, Log information, Maintenance & Upgrade
ONVIF	N/A		ONVIF Profile S			N/A
Max Users	N/A		20 Users			N/A
AUXILIARY INTERFACE						
SD Card	Micro SD, Max 32GB					
RS232 / RS485	N/A / PTZ Control	N/A				N/A / PTZ Control
Alarm	1 Input / 1 Output	2 Input / 1 Output	1 Input / 1 Output		N/A	1 Input / 1 Output
ENVIRONMENTAL						
Power Supply	DC12V/AC24V, PoE(-E model)		DC12V/AC24V, PoE(802.3af)		DC12V, PoE (802.3af)	DC12V/AC24V, PoE(-E model)
Power Consumption	<10W	<10W	Max 7.5W (Motorized lens: +2W)		<3W	<6W
Operating Environment	-10°C～+60°C, 10%～90%		-20°C～+60°C , Less than 90%RH		-20°C～+60°C, Less than 95% RH	-10°C～+60°C, 10%～90%
Dimensions	58mm x 69mm x 139mm	104mm x 306.7mm	151mm x 119mm		110mm x 54mm	58mm x 69mm x 139mm
Weight	700g	1.25Kg	1.25Kg		250g	700g

- 2MSIP-5
- 2MSIP-5W
- 2MSIP-3
- 2MSIP-3W
- 2MSIP-3WDW

Dimensions

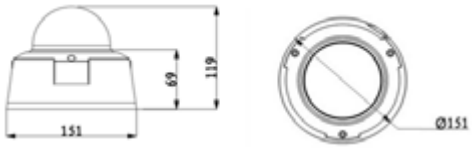
- 2MB-3IR36L312
- 2MB-3IR36L312Z
- 2MB-3IR36L312WD

Dimensions



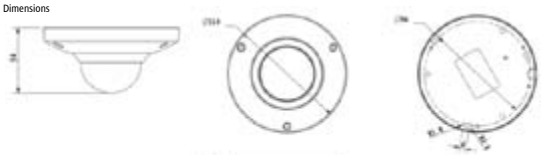
- 2MVIP-3L312
- 2MVIP-3L312Z
- 2MVIP-3IR36L312
- 2MVIP-3IR36L312Z
- 2MVIP-3IR36L312WD

Dimensions



- 2MDIP-M3

Dimensions



Recommended Accessories

Housing | IR Housing | 200W

Housing Bracket

2MP Intelligent Auto Tracking PTZ

Features

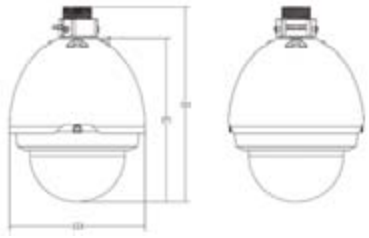
- Powerful 20/30x Optical Zoom
- H.264 & MJPEG dual-stream encoding and JPEG image capture
- WDR
- Day/Night (ICR)
- DNR (2D&3D)
- Auto iris
- Auto focus
- Auto White Balance & Auto Gain Control
- Intelligent Function
- Back Light Compensation
- Support intelligent 3D positioning with DH-SD protocol
- Micro SD memory
- Free CMS, free mobile phone APPs

Specifications

MODEL	**2MPIP-2M20XIVS**	**2MPIP-2M30XIVS**	**2MPIP-2MIR20XIVS**	**2MPIP-2MIR30XIVS**
CAMERA				
Image Sensor	1/3" Exmor CMOS			
Effective Pixels	1944(H) x 1092(V), 2 Megapixels			
Scanning System	Progressive			
Electronic Shutter Speed	1/1 ~ 1/30,000s			
Min. Illumination	Color: 0.05Lux@F1.6,B/W: 0.005Lux@F1.6			
S/N Ratio	More than 50dB			
Video Output	BNC(1.0Vp-p/75Ω), PAL / NTSC			
CAMERA FEATURES				
Day / Night	Auto(ICR) / Color / B/W			
Back Light Compensation	BLC / HLC / DWDR (Digital WDR)			
White Balance	Auto, ATW, Indoor, Outdoor, Manual			
Gain Control	Auto / Manual			
Noise Reduction	Ultra DNR (2D/3D)			
Privacy Masking	Up to 24 areas			
Digital Zoom	16x			
LENS				
Focal Length	4.7mm ~ 94.0mm (20x Optical zoom)	4.3mm~129mm (30x Optical zoom)	4.7mm ~ 94.0mm (20x Optical zoom)	4.3mm~129mm (30x Optical zoom)
Max Aperture	F1.6 ~ F3.5	F1.6 ~ F4.7	F1.6 ~ F3.5	F1.6 ~ F4.7
Focus Control	Auto/Manual			
Angle of View	H: 55.4° ~ 2.80°	H: 65.1°~ 2.34°	H: 55.4° ~ 2.80°	H: 65.1°~ 2.34°
Close Focus Distance	10mm ~ 1000mm	10mm ~ 1200mm	10mm ~ 1000mm	10mm ~ 1200mm
PTZ				
Pan/Tilt Range	Pan: 0° ~ 360° endless; Tilt: -2° ~ 90°, auto flip 180°			
Manual Control Speed	Pan: 0.1° ~ 300°/s; Tilt: 0.1° ~250°/s		Pan: 0.1° ~200° /s; Tilt: 0.1° ~120° /s	
Preset Speed	Pan: 400°/s; Tilt: 300°/s		Pan: 240° /s; Tilt: 200° /s	
Preset	80(DH-SD), 255(Pelco-P/D)			
PTZ Mode	5 Pattern, 8 Tour, Auto Pan, Auto Scan			
Speed Setup	Human-oriented focal length/ speed adaptation			
Power up in Action	Auto restore to previous PTZ and lens status after power failure			
Idle Motion	Activate Preset/Pan/Scan/Tour/Pattern if there is no command in the specified period			
Time Task	Auto activation of Preset/Pan/Scan/Tour/Pattern by preset-time			
Protocol	DH-SD, Pelco-P/D (Auto recognition)			
IR LED	N/A	N/A	150m (2 near IR LED + far IR LED)	
VIDEO				
Compression	H.264 / MJPEG			
Resolution	1080P(1920×1080)/ 720P(1280×720) / D1(704×576/704×480) / CIF(352×288/352×240)			
Frame Rate (Stream) Main	1080P (1 ~ 25/30fps) / 720P(1~50/60fps)			
Frame Rate (Stream) Sub	D1/CIF(1 ~ 25/30fps)			
Bit Rate	H.264: 56K ~ 8192Kbps, MJPEG: 56K ~ 20480Kbps			
AUDIO				
Compression	G.711a / G.711u (32kbps) / PCM (128kbps)			
Interface	1/1 channel In/Out			
Auto Tracking	Single-scene, multiple-scene, panorama-scene			
IVS	Tripwire, Cross Warning Zone, Perimeter Protection, Loitering Detection, Abandoned Object Detection, Missing Object Detection, Illegal Parking, Fast Moving and etc.			
Tracking Trigger Mode	Manual / Auto (alarm triggered)			
Tracking Trigger Event	Targeting, Zoom, Tracking, Recording, Snapshot, Alarm and etc.			
NETWORK				
Ethernet	RJ-45 (10/100Base-T)			
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter, QoS, Bonjour			
ONVIF	ONVIF Profile S			
Max. User Access	20 users			
Smart Phone	iPhone, iPad, Android, Windows Phone			
AUXILIARY INTERFACE				
Memory Slot	Micro SD, Max 64GB			
Alarm	7/2 channel In/Out			
GENERAL				
Power Supply	AC 24V/3A (±10%)			
Power Consumption	20W, 45W(Heater on)			
Working Environment	-40°C ~ 60°C / Less than 90% RH			
Ingress Protection	IP67		IP66	
Vandal Resistance	IK10 (optional)		4000V anti-lightning surge	
Dimensions	□222(mm) x 322(mm)		□252(mm) x 384.3 (mm)	
Weight	5.0kg		6.75kg	

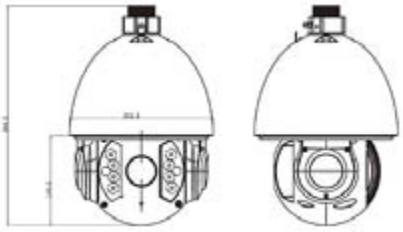
- 2MPIP-2M20XIVS
- 2MPIP-2M30XIVS

Dimensions



- 2MPIP-2MIR20XIVS
- 2MPIP-2MIR30XIVS

Dimensions



Recommended Accessories

Corner Bracket

Wall Surface Bracket

Pole Mount Bracket

Wall Mount Bracket

Ceilingmount Bracket

1.3MP Smart PTZ, 2MP Smart PTZ 3MP Smart PTZ

Features

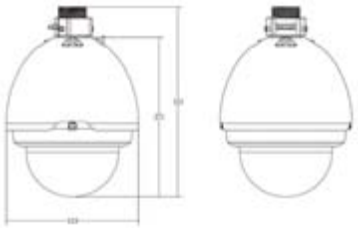
- Powerful 20/30x Optical Zoom
- H.264 & MJPEG dual-stream encoding and JPEG image capture
- Day/Night (ICR) & WDR
- Dynamic Noise Reduction (2D&3D)
- Auto Iris & Auto focus
- Auto White Balance & Auto Gain Control
- Back Light Compensation
- Support intelligent 3D positioning with DH-SD protocol
- Micro SD memory
- IP66
- Free CMS, free mobile phone APPs

Specifications

MODEL		**2MPIP-3M20X**	**2MPIP-3MIR20XWD**	**2MPIP-2M30X**	**2MPIP-2MIR30X**	**2MPIP-1.3M20X**	**2MPIP-1.3MIR20X**
CAMERA							
Image Sensor		1/3" Exmor CMOS		1/2.8" Exmor CMOS		1/3" Exmor CMOS	
Effective Pixels		2048(H) x 1536(V), 3 Megapixels		1944(H) x 1092(V), 2 Megapixels		1280(H) x 960(V)	
Scanning System		Progressive					
Electronic Shutter Speed		1/1 ~ 1/30,000s					
Min. Illumination		Color: 0.05Lux@F1.6,B/W: 0.005Lux@F1.6				Color: 0.05Lux@F1.4; B/W: 0.005Lux@F1.4	
S/N Ratio		More than 50dB					
Video Output		BNC(1.0Vp-p/75Ω), PAL / NTSC					
CAMERA FEATURES							
Day / Night		Auto(ICR) / Color / B/W					
Backlight Compensation		BLC / HLC / WDR (100db, 1080P mode)					
White Balance		Auto, ATW, Indoor, Outdoor, Manual					
Gain Control		Auto / Manual					
Noise Reduction		Ultra DNR (2D/3D)					
Privacy Masking		Up to 24 areas					
Digital Zoom		16x					
Defog		ON/OFF		N/A			
LENS							
Focal Length		4.7mm ~ 94.0mm (20x Optical zoom)		4.3mm~129mm(30x Optical zoom)		4.7mm ~ 94.0mm (20x Optical zoom)	
Max Aperture		F1.6 ~ F3.5		F1.6 ~ F5		F1.4 ~ F2.6	
Focus Control		Auto/Manual					
Angle of View		H: 58.2° ~ 2.9°		H: 65.1° ~ 2.34°		H: 54.1° ~ 3.2°	
Close Focus Distance		10mm ~ 1000mm		10mm~ 1500mm		10mm ~ 1000mm	
PTZ							
Pan/Tilt Range		Pan: 0° ~ 360° endless; Tilt: -2° ~ 90°, auto flip 180°					
Manual Control Speed		Pan: 0.1° ~ 300°/s; Tilt: 0.1° ~250°/s	Pan: 0.1° ~160° /s; Tilt: 0.1° ~120° /s	Pan: 0.1° ~300° /s; Tilt: 0.1° ~150° /s	Pan: 0.1° ~160° /s; Tilt: 0.1° ~120° /s	Pan: 0.1° ~300° /s; Tilt: 0.1° ~150° /s	Pan: 0.1° ~160° /s; Tilt: 0.1° ~120° /s
Preset Speed		Pan: 400°/s; Tilt: 300°/s	Pan: 240° /s; Tilt: 200° /s	Pan: 300° /s; Tilt: 200° /s	Pan: 240° /s; Tilt: 200° /s	Pan: 300° /s; Tilt: 200° /s	Pan: 240° /s; Tilt: 200° /s
Preset		80(DH-SD), 255(Pelco-P/D)					
PTZ Mode		5 Pattern, 8 Tour, Auto Pan, Auto Scan					
Speed Setup		Human-oriented focal length/ speed adaptation					
Power up in Action		Auto restore to previous PTZ and lens status after power failure					
Idle Motion		Activate Preset/Pan/Scan/Tour/Pattern if there is no command in the specified period					
Time Task		Auto activation of Preset/Pan/Scan/Tour/Pattern by preset-time					
Protocol		DH-SD, Pelco-P/D (Auto recognition)					
IR LEDS Length		N/A	100m	N/A	100m (2 near IR LED+ 4 far IR LED)	N/A	100m (2 near IR LED+ 4 far IR LED)
Video							
Compression		H.264 / MJPEG					
Resolution		3MP(2048×1536) / 1080P(1920×1080) / 720P(1280×720) / D1(704×576/704×480) / CIF(352×288/352×240)		1080P(1920×1080) / 720P(1280×720) / D1(704×576/ 704×480) /CIF (352×288/352×240)		1.3M(1280×960) / 720P(1280×720) / D1(704×576/ 704×480) /CIF (352×288/352×240)	
Frame Rate	**Main Stream**	3MP(1 ~ 15fps) / 1080P/720P(1 ~ 25/30fps)		1080P/720P(1 ~ 25/30fps)		1.3M/720P/D1(1 ~ 25/30fps)	
	Sub Stream	D1/CIF(1 ~ 25/30fps)					
Bit Rate		H.264: 56K ~ 8192Kbps, MJPEG: 56K ~ 20480Kbps					H.264: 448K ~ 8192Kbps, MJPEG: 5120K ~ 10240Kbps
AUDIO							
Compression		G.711a / G.711u (32kbps) / PCM (128kbps)					
Interface		1/1 channel In/Out					
NETWORK							
Ethernet		RJ-45 (10/100Base-T)					
Protocol		IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter, QoS, Bonjour					
ONVIF		ONVIF Ver. 2.0 conformance		ONVIF Profile S			
Max. User Access		20 users					
Smart Phone		iPhone, iPad, Android, Windows Phone					
AUXILIARY INTERFACE							
Memory Slot		Micro SD, Max 64GB					
Alarm		7/2 channel In/Out		2/1 channel In/Out			
GENERAL							
Power Supply		AC 24V/3A (±10%)	AC 24V/3A (±10%) / DC12V optional	AC 24V/3A (±10%)	AC 24V/2.2A (±10%)	AC 24V/3A (±10%)	AC 24V/2.2A (±10%)
Power Consumption		15W, 40W(Heater on)	17W, 35W(IR on, Heater on)	9.5W, 21W (Heater on)	10.5W, 26W (IR on, Heater on)	9.5W, 21W (Heater on)	10.5W, 26W (IR on, Heater on)
Working Environment		-40ºC ~ 60ºC / Less than 90% RH					
Ingress Protection		IP67	IP66				
Vandal Resistance		IK10 (optional)		IK10 (optional)		4000V anti-lightning surge	
Dimensions		□222(mm) x 322(mm)	□204.7(mm) x 359.9(mm)	□222(mm) x 322(mm)	□204.7(mm) x 359.9(mm)	□222(mm) x 322(mm)	□204.7(mm) x 359.9(mm)
Weight		5.0kg	7Kg	6.8Kg	7.8Kg	6.8Kg	7.8Kg

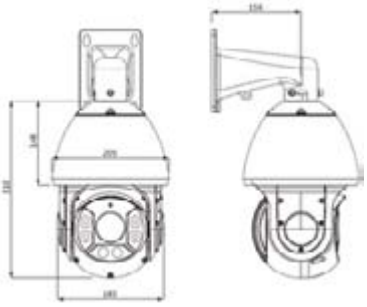
• 2MPIP-3M20X / 2MPIP-2M30X

Dimensions



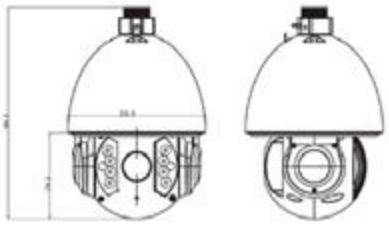
• 2MPIP-3MIR20XWD

Dimensions



• 2MPIP-2MIR30X / 2MPIP-1.3MIR20X

Dimensions



Recommended Accessories

Corner Bracket

Wall Surface Bracket

Pole Mount Bracket

Wall Mount Bracket

Ceilingmount Bracket

1.3MP Network Zoom Camera
2MP Network Zoom Camera

Features

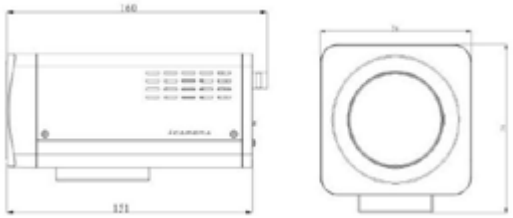
- 20x Optical Zoom
- DWDR
- Auto focus
- Max. 30fps@1080P resolution
- H.264 & Dual-stream video encoding
- Support SD card
- Audio
- Alarm
- PoE

Specifications

MODEL		**2MSZ-2M20X**	**2MSZ-1.3M20X**
CAMERA			
Image Sensor		1/2.8" Exmor CMOS	1/3" 1.3Mp Exmor CMOS
Effective Pixels		1944(H) x 1092(V), 2 Megapixels	1280(H) x 960(V), 1.3 Megapixels
Scanning System		Progressive	Progressive
Electronic Shutter Speed		1/1 ~ 1/10,000s	1/1 ~ 1/30,000s
Min. Illumination		Color: 0.05 Lux/F1.6; B/W: 0.01 Lux/F1.6	Color: 0.05Lux/F1.4 B/W: 0.005 Lux/F1.4
S/N Ratio		More than 50dB	
Video Output		BNC(1.0Vp-p/75Ω), PAL / NTSC	
CAMERA FEATURES			
Day / Night		Auto(ICR) / Color / B/W	
Backlight Compensation		BLC / HLC / WDR (100db, 1080P mode)	Auto, ATW, Indoor, Outdoor, Manual
White Balance		Auto, ATW, Indoor, Outdoor, Manual	
Gain Control		Auto / Manual	
Noise Reduction		2D / 3D	
Privacy Masking		Up to 24 areas	
Digital Zoom		16x	
LENS			
Focal Length		4.7mm ~ 94.0mm (20x Optical zoom)	
Max Aperture		F1.6~ F3.0	F1.4 ~ F2.6
Focus Control		Auto/Manual	
Angle of View		H: 55.4°(wide) ~ 2.9°(tele)	H: 54.1°~ 3.2°
Close Focus Distance		10mm(wide) ~ 1000mm(Tele)	
VIDEO			
Compression		H.264 / MJPEG	
Resolution		1080P(1920×1080) / 720P(1280×720) / D1(704×576/704×480) / CIF(352×288/352×240)	1.3M(1280´960)/720P(1280×720) / D1(704×576/704×480) / CIF(352×288/352×240)
Frame Rate	Main Stream	1080P/720P(1 ~ 25fps)	1.3M/720P(1 ~ 25/30fps)
	Sub Stream	D1/CIF(1 ~ 25fps)	
Bit Rate		H.264: 56K ~ 8192Kbps, MJPEG: 56K ~ 20480Kbps	N/A
AUDIO			
Compression		G.711a / G.711u(32kbps) / PCM(128kbps)	
Interface		1/1 channel In/Out	
NETWORK			
Ethernet		RJ-45 (10/100Base-T)	
Protocol		IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter, QoS, Bonjour	
ONVIF		ONVIF Ver. 2.0 conformance	
Max. User Access		20 users	
Smart Phone		iPhone, iPad, Android, Windows Phone	
AUXILIARY INTERFACE			
RS232		1 port	
RS485		1 port	
RS485		Micro SD, Max 32GB	
RS485		2/1 channel In/Out	
GENERAL			
Power Supply		DC 12V , PoE(802.3af) / AC 24Voptional	AC 24V/DC 12V Optional , PoE
Power Consumption		< 10W	
Working Environment		-40°C ~ +70°C / < 90%RH	
Dimensions		160mm×70mm×70mm	
Weight		1Kg	

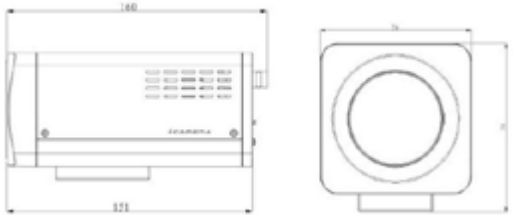
• 2MSZ-2M20X

Dimensions



• 2MSZ-1.3M20X

Dimensions



Recommended Accessories

Housing

IR Housing

Housing Bracket

2MP Mini Speed Dome

Features

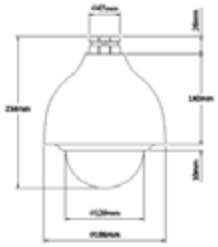
- Powerful 12x optical zoom (5.1 mm~61.2mm)
- Max. 25/30fps@1080P &; 50/60fps@720P
- DWDR, Day/Night (ICR)
- Dynamic Noise Reduction (2D&3D)
- Auto iris
- Auto focus
- Auto White Balance & Auto Gain Control
- Back Light Compensation
- Max 300°/s pan speed, 360° continuous pan rotation
- Up to 255 presets, 5 auto scan, 8 tour, 5 pattern
- Built-in 2/1 alarm in/out
- Support intelligent 3D positioning with DH-SD protocol
- IP66, POE+
- Free CMS, free mobile phone APPs

Specifications

MODEL		2MPIP-M2M12W	2MPIP-M2M12S	2MPIP-M2M12C
CAMERA				
Image Sensor		1/3" CMOS		
Effective Pixels		1944(H) x 1092(V), 2 Megapixels		
Horizontal Resolution		>1000TVL		
Scanning System		Progressive		
Electronic Shutter Speed		1/1 ~ 1/30,000s		
Min. Illumination		Color: 0.05Lux@F1.6,B/W: 0.005Lux@F1.6		
S/N Ratio		More than 55dB		
Video Output		BNC(1.0Vp-p/75Ω), PAL / NTSC		
CAMERA FEATURES				
Day / Night		Auto(ICR) / Color / B/W		
Backlight Compensation		BLC / HLC / DWDR(Digital WDR)		
White Balance		Auto, ATW, Indoor, Outdoor, Manual		
Gain Control		Auto / Manual		
Noise Reduction		2D/3D		
Privacy Masking		Up to 24 areas		
Digital Zoom		16x		
LENS				
Focal Length		5.1mm~61.2mm (12x Optical zoom)		
Max Aperture		F1.2~ F2.1		
Focus Control		Auto/Manual		
Angle of View		51.3° ~ 4.64°		
Close Focus Distance		100mm~1000mm		
PTZ				
Pan/Tilt Range		Pan: 0° ~ 360° endless; Tilt: -2° ~ 90°, auto flip 180°		
Manual Control Speed		Pan: 0.1° ~ 300°/s;Tilt: 0.1° ~120°/s		
Preset Speed		Pan:300°/s;Tilt:200°/s		
Preset		80(DH-SD), 255(Pelco-P/D)		
PTZ Mode		5 Pattern, 8 Tour, 5Auto Scan, Auto Pan		
Speed Setup		Human-oriented focal length/ speed adaptation		
Power up in Action		Auto restore to previous PTZ and lens status after power failure		
Idle Motion		Activate Preset/Pan/Scan/Tour/Pattern if there is no command in the specified period		
Time Task		Auto activation of Preset/Pan/Scan/Tour/Pattern by preset-time		
Protocol		DH-SD, Pelco-P/D (Auto recognition)		
VIDEO				
Compression		H.264 / MJPEG		
Resolution		1080P(1920×1080)/720P(1280×720)/D1(704×576/704×480)/CIF(352×288/352×240)		
Frame Rate	Main Stream	1080P/D1 (1 ~ 25/30fps) /720P(1~50/60fps)		
	Sub Stream	D1/CIF(1 ~ 25/30fps)		
Bit Rate		H.264: 56K ~ 8192Kbps, MJPEG: 56K ~ 20480Kbps		
AUDIO				
Compression		G.711a / G.711u (32kbps) / PCM (128kbps)		
Interface		1/1 channel In/Out		
NETWORK				
Ethernet		RJ-45 (10/100Base-T)		
Protocol		IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter, QoS, Bonjour		
ONVIF		ONVIF Profile S		
Max. User Access		20 users		
Smart Phone		iPhone, iPad, Android, Windows Phone		
AUXILIARY INTERFACE				
Memory Slot		Micro SD, Max 64GB		
Alarm		2/1 channel In/Out		
GENERAL				
Power Supply		AC24V/1.5A(±10%), POE+(802.3at)		
Power Consumption		12W, 22W(Heater on)	12W	
Working Environment		-40℃ ~ 60℃ / Less than 90% RH	-10℃ ~ 60℃ / Less than 90% RH	
Ingress Protection		IP66		N/A
Vandal Resistance		IK10 (optional)		
Dimensions		□186mm×234mm	□170mm×155mm	□198mm×158mm
Weight		2.3Kg	1.8Kg	2.3Kg

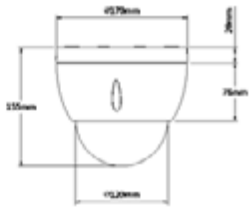
• 2MPIP-M2M12W

Dimensions



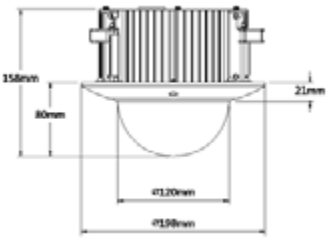
• 2MPIP-M2M12S

Dimensions



• 2MPIP-M2M12C

Dimensions



Eco zNetwork Video Recorder

Features

- Connectable to the third-party network cameras
- Working with 5MP/3MP/2MP/1.3MP/1MP/D1 IP cameras
- 1080P HDMI/VGA simultaneously display
- Intuitive GUI, one-click operation for recording
- Support redundant recording and holiday recording
- Provide instant playback function directly in live view screen
- Max 8ch synchronous playback at 4CIF resolution
- Search/playback by customized tags
- Capable of record files locking & protection
- Support per channel based recording space/days allocation, with advanced HDD quota and disk groups technology
- One self-adaptive 10M/100M/1000M network interface
- Support DDNS (Dynamic Domain Name System)
- Support network detection, such as network delay, packet loss, etc
- Bundled with professional CMS monitoring software and advanced Mobile Apps
- Fully software customization is welcome

Specifications

	2M-8100 ECO NVR Series		2M-8100 ECO PoE NVR Series			2M-8200 ECO NVR Series			
MODEL	2MN-VR8108	2MN-VR8116	2MN-VR8104-P4	2MN-VR8108-P8	2MN-VR8116-P8	2MN-VR8216-T	2MN-VR8216-P16	2MN-VR8232-T	2MN-VR8232-P16
VIDEO/AUDIO INPUT									
IP Video Input	8CH	16CH	4CH	8CH	16CH	16CH	16CH	32CH	32CH
Two-way Audio	1-CH, RCA (2.0 Vp-p, 1kΩ)					1-CH, BNC (2.0 Vp-p, 1kΩ)			
NETWORK									
Incoming Bandwidth	40Mbps	80Mbps	20Mbps	40Mbps	40Mbps	80Mbps		160Mbps	
Output Bandwidth	40Mbps					240Mbps		160Mbps	
Remote Connection	128					128			
VIDEO/AUDIO OUTPUT									
Output Resolution	5MP /3MP 1080P UXGA 720P VGA 4CIF DCIF 2CIF CIF QCIF								
HDMI/VGA Output	1-ch, resolution: 1920 X 1080P /60Hz, 1600 X 1200 /60Hz, 1280 X 720 /60Hz, 1024 X 768 /60Hz								
CVBS (Optional)	1-ch, BNC (1.0 Vp -p, 75 Ω); Resolution: 704 × 576 (PAL); 480 NTSC)								
Audio Output	1-ch, RCA (Linear, 1kΩ)		CH	CH	CH	2-ch, BNC (Linear, 600Ω)			
Playback Resolution	5MP /3MP /1080P UXGA /720P / VGA /4CIF /DCIF /2CIF /CIF /QCIF5		CH	CH	CH	5MP /3MP /1080P UXGA /720P /VGA /4CIF /DCIF /2CIF /CIF /QCIF5			
Synchronous Playback	8-ch 4CIF /4ch, 720P / 2-ch, 1080P /1-CH, 5mp		CH	CH	CH	16CH			
HARD DISK									
SATA	2 SATA interfaces for HDDs					4 SATA interfaces for 2 HDDs + DVD-RW (default), or 4HDDS			
eSATA	N/A					1 eSATA interface			
Capacity	Up to 4TB for each HDD								
EXTERNAL INTERFACE									
Network Interface	1 RJ1 RJ -45 10 /100 1000 Mbps self-adaptive Ethernet interface		RJ-45 10 /100 1000 Mbps self-adaptive Ethernet interface						
Serial Interface	1 RS1 RS -485 half-duplex interface		1 RS -485 half-duplex interface			RS-232; RS-485; Keyboard			
USB Interface	2 × USB 2.0					3 × USB 2.0			
Alarm in/out (optional)	4/1					16/4			
PoE									
Interface	N/A		4 Independent PoE ports	8 Independent PoE ports		N/A	16 Independent 100 Mbps PoE network interfaces	N/A	16 Independent 100 Mbps PoE network interfaces
Max. Power	N/A		52W	120W		N/A	200W	N/A	200W
Supported Standard	N/A		IEEE 802.3af			N/A			
OTHERS									
Power Supply	12V DC		100 ~ 240VAC, 3A, 47~63Hz			100 ~ 240VAC, 6.3A, 50~60Hz			
Consumption	≤ 10 W (without hard disk)		≤ 15 W (without hard disk)			≤ 40 W			
Working Temperature	-10 ℃ ~ +55 C10 ℃								
Working Humidity	10% ~ 90%								
Chassis	19 -inch rackmounted 1U chassis								
Dimensions (W × D H)	45mm445 × 290 45mm		445 x 290 x 45mm			445 x 390 x 70mm			
Weight	≤ 2 Kg (without hard disk)					≤ 4 Kg (without hard disk)	≤ 8 Kg (without hard disk)	≤ 4 Kg (without hard disk)	≤ 8 Kg (without hard disk)

8CH 16CH 32CH H.264

Dimensions

2M-8100 ECO NVR Series (PoE)

Dimensions

2M-8200 ECO NVR Series

Dimensions

Included

- Remote
- External Power Supply
- Rack Mount Holder
- Software & User Manual
- Hard Drive (Optional)
- DVD Drive (Optional)

Design Diagram - Page 14

Standalone Network Video Recorder

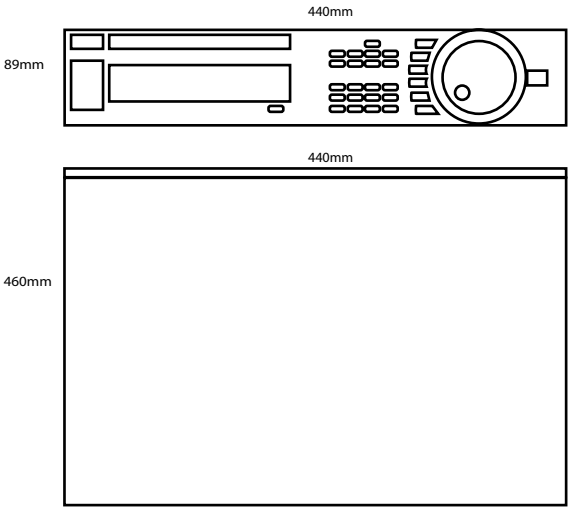
Features

- Up to 8/16/32 channel with 1080p realtime live view
- H.264/MJPEG dual codec decoding
- Up to 5Mp resolution
- Max 240fps@1080p, 480fps@720p, 960fps@D1 preview & recording
- HDMI / VGA simultaneous video output
- 16 channel simultaneous realtime playback, GRID interface
- ONVIF Version 2.0 conformance
- 3D intelligent positioning with 2M Technology PTZ camera
- Support 8 SATA HDDs up to 32TB, 1 eSATA up to 16TB, 4 USB2.0
- Built-in web server, Free CMS, free mobile phone APPs

Specifications

MODEL	2MN-VR9308-S	2MN-VR9316-S	2MN-VR9332-S	2MN-VR9516-SP16	2MN-VR9532-SP16	2MN-VR9564-SP16
SYSTEM						
Main Processor	Dual-core embedded processor					
Operating System	Embedded LINUX					
VIDEO & AUDIO						
IP Camera Input	8 channel	16 channel	32 channel	16 channel	32 channel	64 channel
Two-way Talk	1 channel Input, 1 channel Output, BNC					
DISPLAY						
Interface	1 HDMI, 1 VGA, 1TV					
Resolution	1920×1080, 1280×1024, 1280×720, 1024×768					
Display Split	1/4/8/9	1/4/8/9/16	1/4/8/9/16/25/32	1/4/8/9/16	1/4/8/9/16/25/36	1/4/8/9/16/25/36
OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording					
RECORDING						
Compression	H.264 / MJPEG					
Resolution	5MP(2560×1920) / 3MP(2048×1536) / 1080P(1920×1080) / 720P(1280×720) / D1 (704×576/704×480)					
Record Rate	Max 240fps@ 1080p, 480fps@ 720p, 960fps@ D1			192Mbps		
Bit Rate	48～8192kbps					
Record Mode	Manual, Schedule(Regular(Continuous), MD, Alarm), Stop					
Record Interval	1～120 min (default: 60 min), Pre-record: 1～30 sec, Post-record: 10～300 sec					
VIDEO DETECTION & ALARM						
Trigger Events	Recording, PTZ, Tour, Alarm, Video Push, Email, FTP, Buzzer & Screen tips					
Video Detection	Motion Detection, MD Zones: 396(22×18), Video Loss & Camera Blank					
Alarm Input	8 channel	16 channel				
Relay Output	6 channel					
PLAYBACK & BACKUP						
Sync Playback	1/4/8	1/4/8/16	1/4/8/16	1/4/9/16	1/4/9/16	1/4/9/16
Search Mode	Time/Date, Alarm, MD & Exact search (accurate to second), Smart search					
Playback Function	Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom					
Backup Mode	USB Device / eSATA Device / Internal SATA burner/ Network					
NETWORK						
Ethernet	2 RJ-45 port (10/100M/1000M)					
Network Function	HTTP, TCP/IP, IPv4/IPv6, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPOE, DDNS, FTP, Alarm Server, IP Search(Support 2M Technology IP camera, DVR, NVS and etc.)					
Max. User Access	20 users			128 users		
STORAGE						
Internal HDD	8 SATA ports (8HDDs or 6HDDs+1CD/DVD-RW), up to 32TB			8 SATA ports (8HDDs or 6HDDs+1CD/DVD-RW), up to 32TB, Raid (redundancy)		
External HDD	1 eSATA port (Max 4 SATA HDDs), up to 16TB			1 eSATA port		
AUXILIARY INTERFACE						
USB	4 ports (2 Rear), USB2.0					
RS232	1 port, For PC communication & Keyboard					
RS485	1 port, For PTZ control					
GENERAL						
Power Supply	AC 100～240V, 50/60 Hz					
Power Consumption	40W			75W (without HDD)		
				PoE: Max 15W (each)		
Working Environment	-10～+55℃ / 10～90%RH / 86～106kpa					
Dimension (W×D×H)	2U, 440mm × 460mm × 89mm					
Weight	6KG(without HDD)					

Dimensions



Available on the Android App Store

Available on the App Store

Cloud Computing

Included

- Remote
- External Power Supply
- Rack Mount Holder
- Software & User Manual
- Hard Drive (Optional)
- DVD Drive (Optional)

8CH 16CH 32CH H.264

240fps 200fps 480fps 400fps 960fps 800fps

Design Diagram - Page 14

Corporate Network Video Recorder
Enterprise Network Video Recorder

Features

- Powerful 20/30x Optical Zoom
- H.264 & MJPEG dual-stream encoding and JPEG image capture
- Day/Night (ICR) & WDR
- DNR (2D&3D)
- Auto Iris & Auto focus
- Auto White Balance & Auto Gain Control
- Back Light Compensation
- Support intelligent 3D positioning with DH-SD protocol
- Micro SD memory
- IP66
- Free CMS, free mobile phone APPs

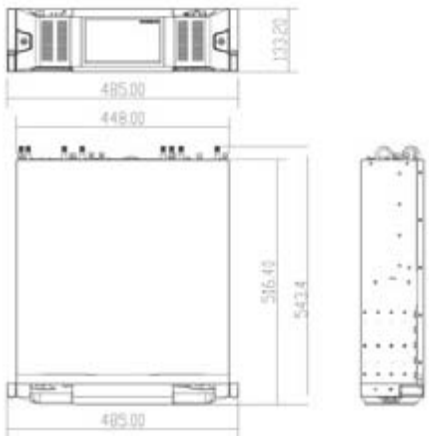
Specifications

MODEL	**2MN-VR9332S-E**	**2MN-VR9564-SE**	**2MN-VR9164-SER**
SYSTEM			
Main processor	Dual-core embedded processor		
Operating System	Embedded LINUX		
VIDEO & AUDIO			
IP Camera Input	32 channel	32 channel	64 channel
Two-way talk	1 channel input, 1 Channel Output, BNC		
DISPLAY			
Interface	1 HDMI, 1 VGA, 1 TV	1 HDMI, 1 VGA, 1 TV	
Resolution	1920 x 1080, 1280 x 1024, 1280 x 720, 1024 x 768		
Display Split	1/4/8/9/16/25/36	1/4/8/9/16/25/36/64	
OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording		
RECORDING			
Compression	H.264 / MJPEG		
Resolution	5MP(2560×1920) / 3MP(2048×1536) / 1080P(1920×1080) / 720P(1280×720) / D1 (704×576/704×480)	1080P(1920×1080) / 720P(1280×720) / D1 (704×576/704×480) & etc.	
Record Rate	Max 128 Mbps (eg. 16CH 5MP@8Mbps, 32CH 1080P @4Mbps&etc)	192 Mbps	
Bit Rate	48～ 8192kbps		
Record Mode	Manual,Schedule(Regular(Continuous), MD, Alarm), Stop Schedule(Regular(Continuous), MD, Alarm), StopSchedule(Regular(Continuous), MD, Alarm), Stop		
Record Interval	1～120 min (default: 60 min), Pre-record: 1～30 sec, Post-record: 10～300 sec		
VIDEO DETECTION & ALARM			
Trigger Events	Recording, PTZ, Tour, Alarm, Video Push, Email, FTP, Buzzer & Screen tips		
Video Detection	Motion Detection, MD Zones: 396(22×18), Video Loss & Camera Blank		
Alarm Input	16 channel		
Relay Output	6 channel		
PLAYBACK & BACKUP			
Sync Playback	1/4/9/16		
Search Mode	Time/Date, Alarm, MD & Exact search (accurate to second), Smart search		
Playback Function	Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom		
Backup Mode	USB Device / eSATA Device / Internal SATA burner/ Network		
NETWORK			
Ethernet	2 RJ-45 port (10/100M/1000M)		
Network Function	HTTP, TCP/IP, IPv4/IPv6, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPOE, DDNS, FTP, Alarm Server, IP Search(Support 2M Technology IP camera, DVR, NVS and etc.)		
Max. User Access	20 Users	128 Users	
Smart Phone	iPhone, iPad, Android, Windows Phone		
STORAGE			
Internal HDD	16 SATA ports (16HDDs), up to 64TB, Raid (redundancy)		
External HDD	1 eSATA port (Max 4 SATA HDDs), up to 16TB	1 eSATA port	
AUXILIARY INTERFACE			
USB	4 ports (2 Rear), USB2.0		
RS232	1 port, For PC communication & Keyboard		
RS485	1 port, For PTZ control		
GENERAL			
Power Supply	AC 100～240V, 50/60 Hz		
Power Consumption	<40W (without HDD)	NVR: 75W (without HDD)	
Working Environment	-10 ～+55°C / 10～90%RH / 86～106kpa		
Dimension (W×D×H	3U, 448mm × 490mm × 132.2mm		
Weight	10.5Kg ～11.5Kg (without HDD)		

Specifications	**2MN-VR9164-S**	**2MN-VR9164-S-LCD**	**2MN-VR95256S-HD**	**2MN-VR95256S-RHD**
SYSTEM				
Main processor	Intel® Core™ i5 Processors		Intel® Core™ i7 Processors	
Operating System	Embedded LINUX			
Motherboard	Embedded Board (Support 7x24 operation)			
Memory	4GB DDR3 (up to 8GB)		8GB DDR3 (up to 16GB)	
Case	Hot-dipped galvanized sheet steel (1.2mm thickened), High-precise aluminum alloy slide, Patented pull-out rack design			
Fan	Dual ball screw bearing fan, MTBF>100,000h, support replacement during operation			
Interface	Local GUI & WEB GUI			
VIDEO & AUDIO				
Input	32 channel		128ch@1080P/256ch@720P	
Transmission	1 channel input, 1 Channel Output, BNC		128ch@1080P/256ch@720P	
Recording	64ch@1080p/128ch@720p/128ch@D1		128ch@1080P/256ch@720P	
Preview	6ch@1080p/12ch@720p/20ch@D1(Screen 1～2) +12ch@1080p/24ch@720p/48ch@D1(Screen 3～6) (Optional)		20ch@1080p/40ch@720p/68ch@D1(Screen 1～2) +16ch@1080p/16ch@720p/16ch @D1 (Screen 3～6) (Optional)	
Playback	4ch@1080p/8ch@720p/16ch@D1 (Screen 1)		16ch@1080P/720P/D1 (128Mbps in Raid 5 mode) 8ch@1080P/16ch@720P/D1 (64Mbps in single HDD mode)	
Recording Resolution	8Mp, 5Mp, 3Mp, 1080p, 720p, 960H, D1, CIF, QCIF, VGA		8Mp, 5Mp, 3Mp, 1080P, 720P, 960H, D1, CIF, QCIF, VGA	
Audio	1ch Mic in, 1ch audio in/ out		1ch Mic in, 1ch Mic out	
DISPLAY				
Interface	6 HDMI, 1 VGA (Default: 2 HDMI)		2 HDMI+1 VGA (Optional: 6 HDMI,)	
Video Output	6 HDMI, or 1ch VGA(or built-in LCD) & 5ch HDMI sync video output		2 HDMI/1 HDMI+VGA (Optional: 6 HDMI sync output/1 VGA+5 HDMI sync output)	
Multi-screen Display	The 1st screen: 1/4/8/9/16/25/36/64 The 2nd-6th screens: 4 (optional)			
Privacy Masking	4 customized zones for privacy masking for each area			
RECORDING				
Recording Mode	Manual, Schedule(Regular(Continuous), MD(Video detection: Motion detection, Camera blank, Video loss), Alarm), Stop			
Alarm Recording	Video loss, Camera blank, Motion detection, External alarm			
Backup Mode	Network download / USB HDD/USB CD&DVD-RW / eSATA Device			
STORAGE				
Internal HDD	16 SATA II ports (16 HDDs), up to 64TB, Raid (redundancy)		24 SATA ports, up to 96TB	
HDD Mode	Single, Raid 0, Raid 1, Raid 5. (Support global HDD Hot-standby) (Optional)			
HDD Installation	Independent HDD rack, support hot swap			
NETWORK				
Interface	4 RJ-45 ports(10/100/1000M)			
Ethernet Port	4 Ethernet ports joint working or 4 independent 1000M Ethernet ports			
MD & ALARM				
Front cover	Support hot swap, 7" inch HD LCD (1920 x 1080 / 1280 x 1024 / 1024 x 768) (Model –D & DR only)			
Motion Detection	N/A		Zones: 396 (22x18), Sensitivity: 1～6 (level 6 is highest)	
Alarm Input	N/A		4ch, low level effective, green terminal interface	
Relay Output	N/A		4ch, Relay contact(1A@24VDC), NO/NC programmable, green terminal interface	
USB	4 USB ports(2 on the front-panel, 2 on the rear panel)			
eSATA	1 eSATA (Video Backup)			
GENERAL				
Power Supply	100V-240Vac, 47-63Hz	100V-240Vac, 47-63Hz, Redundant	100V-240Vac, 47-63Hz	100V-240Vac, 47-63Hz, Redundant
Power Consumption	10W～200W (Include HDD)		200W～400W (Include HDD)	
Working Environment	-10 ～+55°C / 10%～80% (non-condensation)		0 ～+40°C / 10%～80% (non-condensation)	
Dimension (W×D×H	485mm×448mm×133.2mm		4U, 480mm×494mm×175mm	
Weight	20Kg (without HDD)		29Kg (without HDD)	
Installation	Rack-mounted			

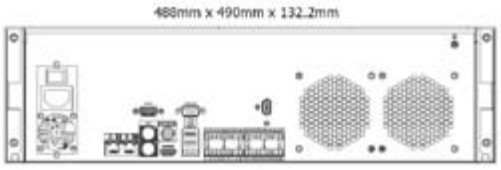
- 2MN-VR9164-S-LCD
- 2MN-VR95256S-HD
- 2MN-VR95256S-HD

Dimensions



- 2MN-VR9332S-E
- 2MN-VR9564-SE
- 2MN-VR9164-SER
- 2MN-VR9164-S

Dimensions



Included

- Remote
- Internal Power Supply
- Rack Mount Holder
- Software & User Manual
- Hard Drive (Optional)

Design Diagram - Page 14

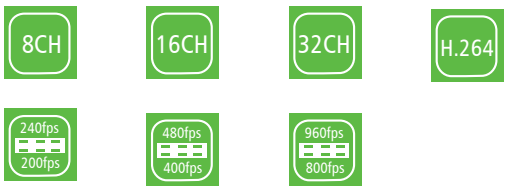
Standalone Network Video Recorder

Features

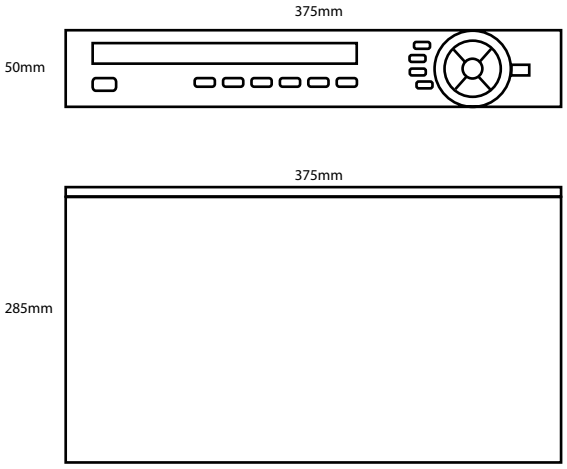
- Up to 8/16/32 channel with 1080p realtime live view
- H.264/MJPEG dual codec decoding
- Up to 5Mp resolution
- Max 240fps@1080p, 480fps@720p, 960fps@D1 preview & recording
- HDMI / VGA simultaneous video output
- 16 channel simultaneous realtime playback, GRID interface
- ONVIF Version 2.0 conformance
- 3D intelligent positioning with 2M Technology PTZ camera
- 8 PoE ports, Plug&Play (Poe Model)
- Support 2 SATA HDDs up to 8TB, 2 USB2.0
- Built-in web server, Free CMS, free mobile phone APPs

Specifications

MODEL	**2MN-VR9308-A**	**2MN-VR9316-A**	**2MN-VR9332-A**	**2MN-VR9308-AP8**	**2MN-VR9316-AP8**	**2MN-VR9332-AP8**
SYSTEM						
Main Processor	Dual-core embedded processor					
Operating System	Embedded LINUX					
VIDEO & AUDIO						
IP Camera Input	8 channel	16 channel	32 channel	8 channel	16 channel	32 channel
Two-way Talk	1 channel Input, 1 channel Output, BNC					
DISPLAY						
Interface	1 HDMI, 1 VGA, 1TV					
Resolution	1920×1080, 1280×1024, 1280×720, 1024×768			1920×1080, 1280×1024, 1280×720, 1024×768		
Display Split	1/4/8/9	1/4/8/9/16	1/4/8/9/16/25/32	1/4/8/9	1/4/8/9/16	1/4/8/9/16/25/32
OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording					
RECORDING						
Compression	H.264 / MJPEG					
Resolution	5MP(2560×1920) / 3MP(2048×1536) / 1080P(1920×1080) / 720P(1280×720) / D1 (704×576/704×480)					
Record Rate	Max 128Mbps (e.g. 16ch 5MP @8Mbps, 32ch 1080P @4Mbps &; etc.)			Max 240fps@ 1080p, 480fps@ 720p, 960fps@ D1		
Bit Rate	48~ 8192kbps					
Record Mode	Manual, Schedule(Regular(Continuous), MD, Alarm), Stop					
Record Interval	1~120 min (default: 60 min), Pre-record: 1~30 sec, Post-record: 10~300 sec					
VIDEO DETECTION & ALARM						
Trigger Events	Recording, PTZ, Tour, Alarm, Video Push, Email, FTP, Buzzer & Screen tips					
Video Detection	Motion Detection, MD Zones: 396(22×18), Video Loss & Camera Blank					
Alarm Input	8 channel					
Relay Output	3 channel					
PLAYBACK & BACKUP						
Sync Playback	1/4/8	1/4/8/16	1/4/8/16	1/4/8	1/4/8/16	1/4/8/16
Search Mode	Time/Date, Alarm, MD & Exact search (accurate to second), Smart search					
Playback Function	Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom					
Backup Mode	USB Device / Network					
NETWORK						
Ethernet	RJ-45 port (10/100M/1000M)					
Network Function	HTTP, TCP/IP, IPv4/IPv6, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPOE, DDNS, FTP, Alarm Server, IP Search(Support 2M Technology IP camera, DVR, NVS and etc.)					
Max. User Access	20 users					
Smart Phone	iPhone, iPad, Android, Windows Phone					
STORAGE						
Internal HDD	2 SATA ports					
AUXILIARY INTERFACE						
USB	2 ports (1 Rear), USB2.0					
RS232	1 port, For PC communication & Keyboard					
RS485	1 port, For PTZ control					
Max. User Access	20 users			N/A		
GENERAL						
Power Supply	NVR: DC12V			NVR: DC12V PoE Port: DC48V		
Power Consumption	Power Consumption			NVR: 20W(without HDD) PoE Port: Max. 15(each)		
Working Environment	-10 ~+55°C / 10~90%RH / 86~106kpa					
Dimension(W×D×H)	1U, 375mm × 285mm × 50mm					
Weight	2.3KG(without HDD)					



Dimensions



Included

- Remote
- External Power Supply
- Rack Mount Holder
- Software & User Manual
- Hard Drive (Optional)
- CD Drive (Optional)

Design Diagram - Page 14

Design Diagram
IP System

Wireless Router

BNC
VGA
HDMI
Network

PTZ Control

Power Supply

IP Cameras

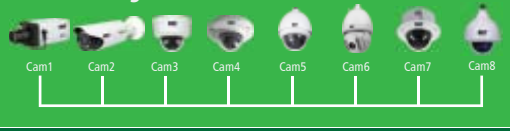
Mic
Mouse (Included)

Power Outlet

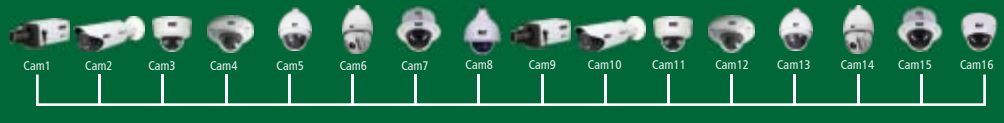
Cat 5
Cat 6
Network Cable

4 CH System

2MDVR-6008T-EL
8 CH System



2MDVR-6016T-STL
16 CH System



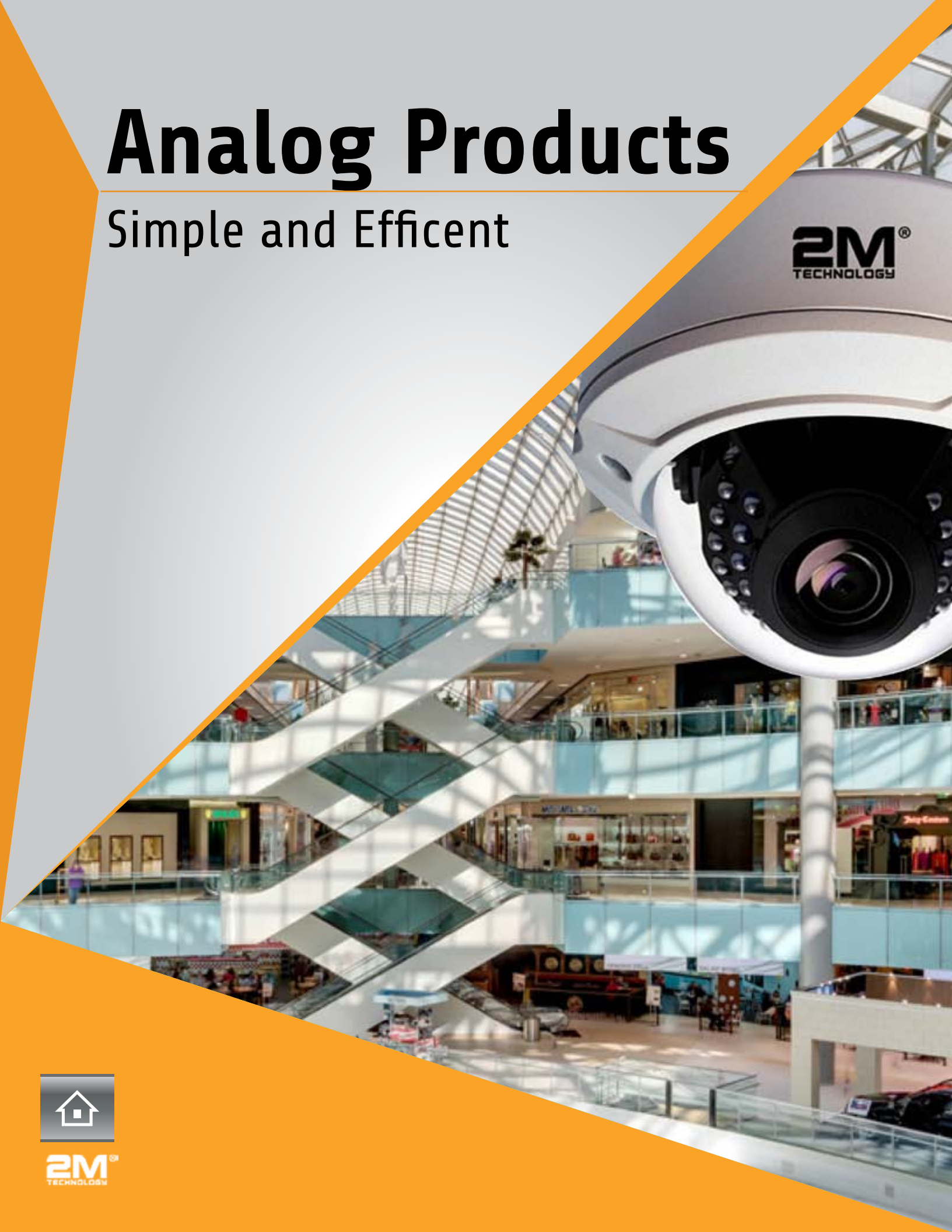
IP Cameras

- 2MP Series
- 3MP Series
- 5MP Series
- 2MP Intelligent PTZ
- Smart Megapixel PTZ
- Network Zoom
- Mini Speed Dome

• Diagrams are for illustrative purposes only

Analog Products

Simple and Efficent



960H Analog Technology

Effio-E

• Effio series with 960H CCD image sensor is a leading analog CCTV camera field as the global standard by Sony's excellent technology such as high horizontal resolution, high sensitivity, high SN ratio, exact color reproduction and wide dynamic range demanded for security cameras and so on.

Main Features

- Over 700 TVL
- ATR
- 2D NR
- Motion Detection
- Privacy Mask
- HLC
- Exposure Control for IR Light
- Defog
- RS-485
- OSD
- Lower Power Consumption
- LFBGA Package (12mm)

Low Light Performance

- High sensitivity: More brightness and color in even low luminance
- Clear image under IR LED:Not saturated image by "IR optimizer"

Color Reproduction

- Exact color reproduction
- Wide range ATW (1800 K - 10500 K)
- Sony CCD & Effio can be used regardless of the light source and the time of day.

Digital Noise Reduction

ATR/ATR-EX

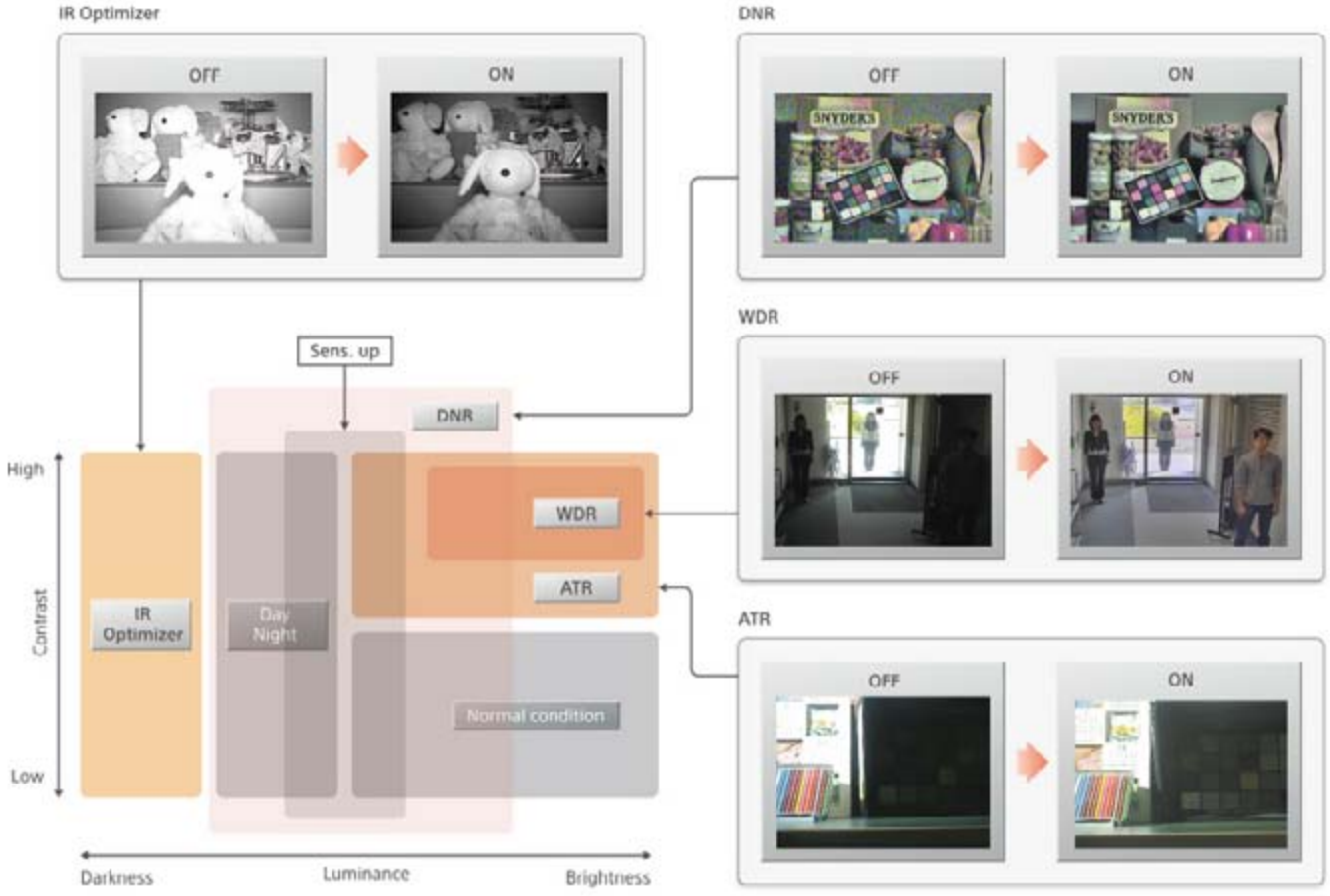
• ATR (Adaptive Tone Reproduction) improves the visibility of the entire picture by the optimum gradation compensation.

Wide Dynamic Range (WDR)

• Improvement of visibility under high contrast scene by double shutter and intelligent image processing.
• Easy tuning for every high contrast scene.

Wide Range Visibility

• Effio provides excellent visibility in all light conditions from “high brightness” or “high contrast” to “low light” or “complete dark”.



All In One Analog Camera Series

Features

- 1/3" SONY Effio 960H Super HAD CCD II
- Varifocal 2.8-12mm (Except Box Camera)
- OSD Function: OSD Control key on cable
- 2D/3D Digital Noise Reduction
- White Balance
- Back Light Compensation

Specifications

MODEL	**2MS-70**	**2MB-70AR2L212**	**2MD-70L212**	**2MD-70IR21L212**	**2MV-70L212**	**2MV-70IR30L212**
Sensor	1/3" SONY Effio 960H Super HAD CCD II"					
Sync System	Internal, Negative Sync		Internal, Negative Sync	Internal	Internal, Negative Sync	Internal
Horizontal Resolution	Over 700 TVL					
Pixels	PAL: 795(H) x 596(V) NTSC: 811(H) x 508(V)					
Clock Frequency (MHz)	NTSC: 28.636, PAL: 28.375	N/A	N/A	N/A	N/A	N/A
Scanning System	2:1 Interlace		2.1 Interlace	PAL: 625 Lines, 50 Field / sec. NTSC: 525 Lines, 60 Field / sec.		
TV System	PAL / NTSC					
Min Illumination	0.00 Lux		0.01 Lux	0 Lux / F2.0 (LED On)	0.01 Lux	0 Lux / F2.0 (LED On)
IR LED	N/A	2 x 42 pcs	N/A	5 x 30 pcs	N/A	5 x 30 pcs
IR Distance	N/A	40m	N/A	30m (IR Night Vision)	N/A	30m
Lens	C/CS	2.8-12mm Varifocal	2.8-12mm Manual Zoom	2.8-12mm Varifocal		
Iris Control	Video / DC Iris					
IR Status	N/A	Under 10 Lux By CDS	N/A	Under 10 Lux By CDS	N/A	Under 10 Lux By CDS
IR Power On	N/A		N/A	CDS Auto Control	N/A	CDS Auto Control
S/N Ratio	>48dB (AGC Off)					
White Balance	Auto					
Gain Control	Auto					
Back Light Compensation	ON / OFF (optional)					
Gamma Correction	0.45 Ohm					
Video Out	Composite Signal (1.0 Vp-p, 75)					
Auto Electronic Shutter	PAL: 1/50-1/100,000 sec. NTSC: 1/60-1/100,000 sec.					
Operation Temperature	-10°C ~ +50°C / RH95% Max					
Water Resistance	N/A	IP66	N/A	N/A	IP66	
Power Source	12VDC (+/-10%) / 120mA	12VDC / 400mA	12VDC (+/-10%) / 120mA	12VDC / 300mA		
Dimensions	64mm (W) x 65mm (H) x 130mm (D)	148mm (W) x 107mm (H) x207mm	127mm (R) x 94mm (H)	140mm (R) x 83mm (H)	117mm (R) x 92mm (H)	149mm (R) x 99mm (H)
Weight	390g	2000g	249g	280g	970g	980g

• 2MS-70

• 2MB-70AR2L212

• 2MD-70L212

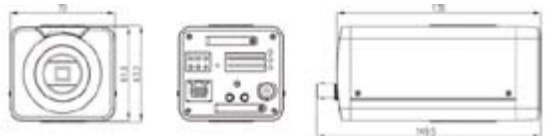
• 2MD-70IR21L212

• 2MV-70IR30L212

• 2MV-70L212

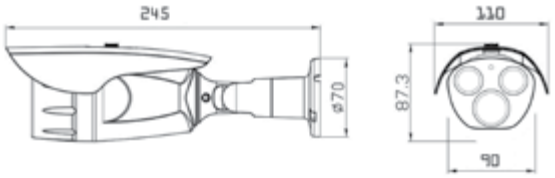
- 2MS-70

Dimensions



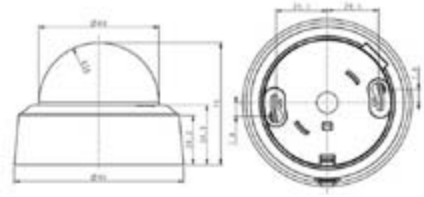
- 2MB-70AR2L212

Dimensions



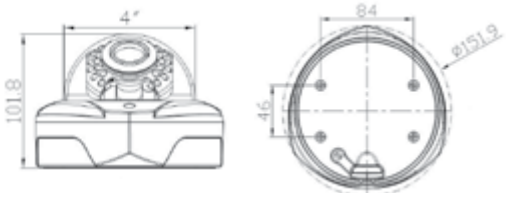
- 2MD-70L212
- 2MD-70IR21L212

Dimensions



- 2MV-70L212
- 2MV-70IR30L212

Dimensions



Recommended Accessories

Housing

IR Housing

Housing Bracket

LENS: 2.8-12mm
5-100mm

High Speed Dome 960H

Features

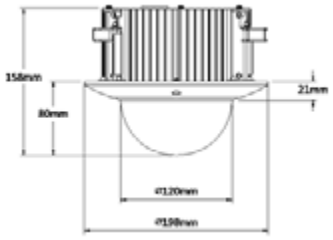
- Speed Dome
- Weather proof PTZ 960H
- Resolution: 960H 700TVL
- Optical Zoom: 23x ~ 36x
- Some models with IR LEDs
- Indoor/Outdoor housing options
- Predefined presets
- Continuos 360°

Specifications

MODEL	**2MP-7023XC**	**2MP-7036XWE**	**2MP-7036XWDR**	**2MP-70IR36XW**	**2MP-70IR36XWDR**
CAMERA					
Image Sensor	1/4" Super HAD CCD II				
Effective Pixels	752(H) × 582(V) / 768(H) × 494(V)	976(H) ×582(V) /976(H) ×494(V)	752(H) x 582(V) / 768(H) x 494(V)	976(H) ×582(V) /976(H) ×494(V)	752(H) x 582(V) / 768(H) x 494(V)
Scanning System	Interlacing		Progressive		
Electronic Shutter Speed	1/1s ~1/100,000s				1/3(4) ~ 1/10,000s
Min. Illumination	Color: 0.01 Lux/F1.6 B/W: 0.001Lux/F1.6		1.4 lux (F1.6, 50IRE) 0.1 lux/Color0.01 lux/B/W, (1/3,1/4 sec)	Color: 0.01 Lux/F1.6 B/W: 0Lux(IR on)	1.4 lux (F1.6, 50IRE)
S/N Ratio	More than 50dB				
Video Output	BNC(1.0Vp-p/75Ω), PAL / NTSC				
CAMERA FEATURES					
Day / Night	Auto(ICR) / Color / B/W				
Backlight Compensation	BLC / HLC / WDR (100db, 1080P mode)	BLC / HLC / DWDR (Digital WDR)	ON/OFF	BLC / HLC / DWDR (Digital WDR)	BLC / HLC / DWDR
White Balance	Auto, ATW, Indoor, Outdoor, Manual		Auto, ATW, Indoor, Outdoor, Outdoor Auto, Sodium Vapor Lamp (fix/ auto), One-push,	Auto, ATW, Indoor, Outdoor, Manual	
Gain Control	Auto / Manual		Auto/Manual/Max. Gain Limit (-3 dB to +28 dB, 2 dB steps)	Auto / Manual	
Noise Reduction	2D / 3D				
Privacy Masking	Up to 24 areas				
Digital Zoom	16x		12x	16x	12x
LENS					
Focal Length	3.9 mm~89.7mm (23x Optical zoom)	3.4mm~122.4mm (36x Optical zoom)			
Max Aperture	F1.6 ~ F3.7	F1.6~ F4.5			
Focus Control	Auto/Manual				
Angle of View	61.68° ~ 3.06°	H: 57.8°~1.7°			
Close Focus Distance	10mm ~ 1000mm		10mm ~ 1500mm	10mm ~ 1000mm	10mm ~ 1500mm
PTZ					
Pan/Tilt Range	Pan: 0° ~ 360° endless; Tilt: -2° ~ 90°, auto flip 180°				
Manual Control Speed	Pan: 0.1° ~ 250°/s; Tilt: 0.1° ~150°/s		Pan: 0.1° ~ 300°/s; Tilt: 0.1° ~150°/s	Pan: 0.1° ~ 160°/s; Tilt: 0.1° ~120°/s	
Preset Speed	Pan: 300°/s; Tilt: 200°/s		Pan: 400°/s; Tilt: 180°/s	Pan: 240°/s; Tilt:200°/s	
Preset	80(DH-SD), 255(Pelco-P/D)				
PTZ Mode	5 Pattern, 8 Tour, Auto Pan, Auto Scan				
Speed Setup	Human-oriented focal length/ speed adaptation				
Power up in Action	Auto restore to previous PTZ and lens status after power failure				
Idle Motion	Activate Preset/Pan/Scan/Tour/Pattern if there is no command in the specified period				
Time Task	Auto activation of Preset/Pan/Scan/Tour/Pattern by preset-time				
Protocol	DH-SD, Pelco-P/D (Auto recognition)				
IR Distance	N/A			100m(2 near IR LED +4 far IR LED)	
Auxiliary Interface					
RS485	1 port				
GENERAL					
Power Supply	AC24V/1.5A (±10%), DC12V optional	AC 24V/3A (±10%) / DC12V optional	AC 24V/1.5A(±10%)	AC 24V/3A (±10%) / DC12V optional	
Power Consumption	12W, 24W(Heater on)			15W, 28W(IR on, Heater on)	
Working Environment	-40ºC ~ 60ºC / Less than 90% RH				
Ingress Protection	IP66				
Vandal Resistance	IK10 (optional)				
Dimensions	186mm×234mm	222(mm) x 324 (mm)		185(mm) x 299(mm)	
Weight	2Kg	5Kg			

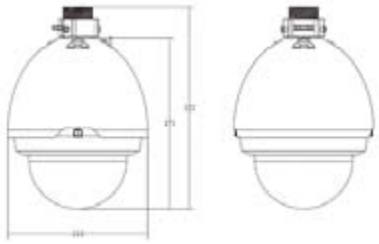
- 2MP-7023XC — In-Ceiling

Dimensions



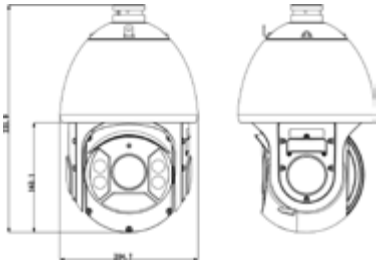
- 2MP-7036XWE
- 2MP-7036XWDR — Indoor/Outdoor

Dimensions



- 2MP-70IR36XW
- 2MP-70IR36XWDR — Indoor/Outdoor

Dimensions



Recommended Accessories

Corner Bracket

Wall Surface Bracket

Pole Mount Bracket

Wall Mount Bracket

Ceilingmount Bracket

960H Real Time Digital Video Recorder

Features

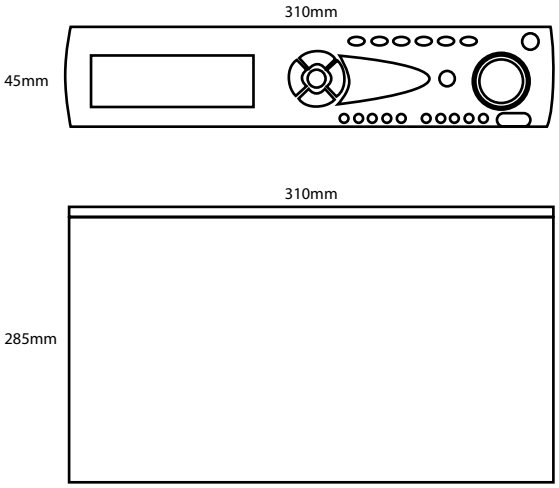
- Intelligent analyze function including the core function of perimeter detection (picket line & security area), objects care (lost or left over), video diagnosis and etc, but also support alarm linkage to make monitor more and more ease
- With cloud service, easy to achieve a variety of network penetration, one step to remote monitoring, getting rid of various complicated network settings, easy and simple to operate
- H.264 High Profile compression algorithm, 30% decrease of stream due to advanced space-time filtering technology
- Completed protective circuit, unique treble watchdog function, makes device never crashed

Specifications

MODEL		2MD-VR9604H	2MD-VR9608H	2MD-VR9616H
System	Main Processor	Hi3520A		
	Operating System	Embedded LINUX operating system		
	System Resource	Multi-channel real-time recording synchronously, multi-channel real-time playback, multi-channel multi-user network operation, USB back up		
Interface	Operation Interface	16 bit real color GUI interface support mouse operation		
	Display Screen	Take all analog input as an example, others are depended on the selected channel mode		
		1/4 screen	1/4/8/9 screen	1/4/8/9/16 screen
	Video Standard	PAL (625 lines, 50fps) ; NTSC (525lines, 60fps)		
	Image Encode	H.264(High Profile)		
	Monitor Quality	Monitor: D1; VGA: High Definition; HDMI: High definition		
	Playback Quality	Max support 1080P; under local analog input mode		
		960H/D1/HD1/CIF/QCIF		
	Encode Capability	4ch D1/960H real-time	8ch D1/960H real-time	16ch D1/960H real-time
	Decode Capability	4ch D1/960H real-time	8ch D1/960H real-time	16ch D1/960H real-time
	Multi-Mode Video Input	Local analog input: 4*D1/4 *960H Local analog + network digital input: 2 *D1+(1*1080P+1*720P) All network digital input: 8*960H/4*720P /2*1080P/1*720P+ 7*D1/1*1080P+1*720P+2*D1	Local analog input: 8*HD1 /8 * 960H Local analog + network digital input:4 *D1+(1*1080P+ 3*720P) All network digital input: 16*D1/2*1080P+2*720P/1*1080P+ 1*720P+6*960H/8*720P	Local analog input:16*D1+16*960 Local analog+network digital input: (8 *D1+16*D1/8*D1+18*720P) All network digital input: 24*D1/4*1080P /1*1080P+8*720P /2*1080P+4*720P +4*960H
	Motion Detection	Each channel can set 192 (16*12) detection area; can set multi-level of flexibility (for local analog channel only)		
Audio	Audio Compression	G711A		
Record and Playback	Bidirectional Talk	Support		
	Record Mode	Manual>alarm>motion detection>timing		
	Local Playback	1-9ch playback synchronously		
		Under the mode of local4*960H@ Max support 4ch playback (4*960H @25fps)	Under the mode of local8*960H Max supporrt 4ch playback (4*960H@25fps)	Under the mode of local 16*960H,Max support 8ch playback (*960H@25fps)
	Video Search	Time,date,event,channel search		
Storage and Back Up	Space Ocuppation	Video:CIF4~5G/day*channel, D1 10~10G/day*channel; 960H10~10G/day*channelaudio: 691.2M/day*channel		
	Video Storage	Local HDD, Network		
	Back Up Mode	Network backup, USB portable HDD, USB imprint, SATA imprint		
Interface	Video Input	4ch BNC	8ch BNC	16ch BNC
	Video Output	1ch BNC, 1ch VGA, 1ch HDMI	1ch BNC (With 1ch spot, 1ch VGA, 1ch HDMI	
	Loop through Output	4ch	8ch	16ch
	Audio Input	4ch RCA	8ch RCA	16ch RCA
	Audio Output	1ch RCA		
	Alarm Input/ Alam Output	16ch / 4ch		
	Network Interface	RJ45 10M/100M self-adaptive Ethernet port		
	PTZ Control	1 RS485; support multi kinds of PTZ protocol		
	USB Port	2*USB2.0		
	HDD Port	1 SATA port (each max support 2048G)		
	Wireless Port	3G (WIFI(extension via USB port)		
Others	Power	12V/3A		
	Dimensions	310mm(Length)* 285mm(Width)* 45mm(Height)		

Dimensions

Dimensions



Included

- Remote
- Internal Power Supply
- Rack Mount Holder
- Software & User Manual
- Hard Drive (Optional)
- CD Drive (Optional)

Design Diagram - Page 23

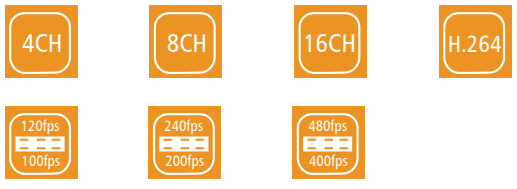
960H Digital Video Recorder

Features

- HD iDVR combines the functions of DVR/HVR/NVR together
- Operating System Embedded LINUX operating system
- Video Output 1ch BNC, 1ch VGA, 1ch HDMI
- 2 USB port for mouse, backup and upgrade
- Recording bit/frame adjustable
- Support PTZ(RS485)/Alarm(4ch)
- Support 4ch auido in / 1ch audio output
- Support CMS and IE browser
- Support 2 pcs 2TB SATA HDD or 1DVD and 1HHD SATA
- Support Symbian,Windows Mobile,Blackberry ,Android,and iPhone APP

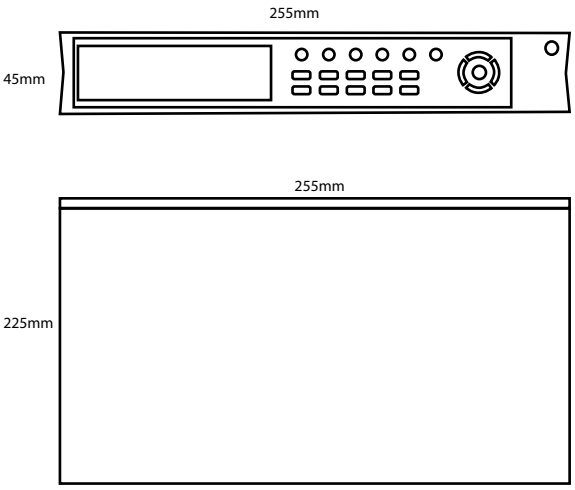
Specifications

MODEL		**2MDVR-6004T-H**	**2MDVR-6008T-EL**	**2MDVR-60016T-STL**
System	Main Processor	Hi3520A		
	Operating System	Embedded LINUX operating system		
	System Resource	Multi-channel real-time recording synchronously, multi-channel real-time playback, multi-channel multi-user network operation, USB back up		
Interface	Operation Interface	16 bit real color GUI interface support mouse operation		
	Display Screen	Take all analog input as an example, others are depended on the selected channel mode		
		1/4 screen	1/4/8/9 screen	1/4/8/9/16 screen
	Video Standard	PAL (625 lines, 50fps) ; NTSC (525lines, 60fps)		
	Image Encode	H.264(High Profile)		
	Monitor Quality	Monitor: D1; VGA: High Definition; HDMI: High definition		
	Playback Quality	Max support 1080P; under local analog input mode		
		960H/D1/HD1/CIF/QCIF	D1/HD1/CIF/QCIF	D1/HD1/CIF/QCIF
	Encode Capability	4ch D1/960H real-time	8ch HD1/D1 real-time	2ch D1+14ch CIF real-time
	Decode Capability	4ch D1/960H real-time	8ch HD1/1ch D1 real-time	2ch D1+6ch CIF real-time
	Multi-Mode Video Input	Local analog input: 4*D1/4 *960H Local analog + network digital input: 2 *D1+(1*1080P +1*720P) All network digital input: 8*960H /4*720P /2*1080P /1*720P+7*D1 /1*1080P+1*720P +2*D1	Local analog input: 8*HD1 /8 *D1 Local analog + network digital input: 2 *D1+(1*1080P + 1*720P) All network digital input: 8*960H /4*720P /2*1080P /1*720P+7*D1 /1*1080P+1*720P +2*D1	Local analog input: 2*D1+14*CIF Local analog + network digital input: 2 *D1+(1*1080P + 1*720P) All network digital input: 8*960H /4*720P /2*1080P /1*720P+7*D1 /1*1080P+1*720P +2*D1
	Motion Detection	Each channel can set 192 (16*12) detection area; can set multi-level of flexibility (for local analog channel only)		
Audio	Audio Compression	G711A		
Record and Playback	Bidirectional Talk	Support		
	Record Mode	Manual>alarm>motion detection>timing		
	Local Playback	1-9ch playback synchronously		
		Under the mode of local4*960H@ Max support 4ch playback (4*960H @25fps)	Under the mode of local 8*D1@ Max support 4ch playback (1* D1@25fps)	Under the mode of local2*D1+14*CIF@ Max support 8ch playback (2*D1+6*CIF @25fps)
	Video Search	Time,date,event,channel search		
Storage and Back Up	Space Ocuppation	Video: CIF 4~5G/day*channel, D1 16~20G/day*channel; audio: 691.2M/day*channel		
	Video Storage	Local HDD, Network		
	Back Up Mode	Network backup, USB portable HDD, USB imprint, SATA imprint		
Interface	Video Input	4ch BNC	8ch BNC	16ch BNC
	Video Output	1ch BNC, 1ch VGA, 1ch HDMI		
	Audio Input	4ch RCA		2ch RCA
	Audio Output	1ch RCA		
	Alarm Input/ Alam Output	N/A		
	Network Interface	RJ45 10M/100M self-adaptive Ethernet port		
	PTZ Control	1 RS485; support multi kinds of PTZ protocol		
	USB Port	2*USB2.0		
	HDD Port	1 SATA port (each max support 2048G)		
	Wireless Port	3G (WIFI(extension via USB port)		
Others	Power	12V/3A		
	Dimensions	255mm(Length)* 225mm(Width)* 45mm(Height)		



Dimensions

Dimensions



Included

- Remote
- External Power Supply
- Rack Mount Holder
- Software & User Manual
- Hard Drive (Optional)
- CD Drive (Optional)

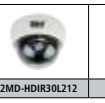
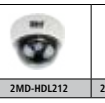
Design Diagram - Page 23

HD-SDI Series

Features

- 1/3" 2.4 Megapixel Sony CMOS
- Main stream: 1080P@25fps, 720P@25fps
- Resolution: 2.4MP
- 1.0 Lux (Color). 0.5 Lux (BW), 0.02Lux (Sens-up x6)
- WDR
- EZoom
- Motion Detection
- DIS

Specifications

						
MODEL	**2MB-HDAR2L212**	**2MS-HD**	**2MD-HDIR30L212**	**2MD-HDL212**	**2MV-HDIR30L212**	**2MV-HDL212**
Sensor	1/3" 2.4 Megapixel Sony CMOS					
Total Pixels	2000(H) X 1241(V) = 2.48MP					
	NTSC / PAL					
Effective Pixels	1984(H) X 1255(V) = 2.43MP					
Min Illumination	1.0Lux(Color) , 0.5Lux(BW) , 0.02Lux(Sens-up x60)					
IR LED	2 Array	N/A	30 Units	N/A	30 Units	N/A
Lens	2.8-12mm Auto Iris Varifocal					
Video Output Level	HD-SDI / 1.0 Vp-p (75Ω, Composite) NTSC/ PAL(Selectable)					
Horizontal Resolution	2.4 Megapixel					
S/N	More than 50dB(AGC off)					
White Balance	AWB / AWC-SET / MANUAL / INDOOR / OUTDOOR					
Back Light Compensation	Back Light Compensation / HSBack Light Compensation / Off					
ACCE (Adaptive Color & Contrast Enhancement)	Low / Middle / High / Off					
Automatic Gain Control (AGC)	Low / Middle / High					
Adjust	SHARPNESS / MONITOR / LSC / NTSC/PAL					
Day Night	Auto / B.W / Color / EXT (Selectable)					
2D/3D-NR	2DNR / 3DNR / SMART NR					
Privacy Masking	On / Off (8 Zone Selectable)					
Motion Detection	On / Off (3 Zone Selectable)					
Defect	LIVE DPC / STATIC DPC					
D-EFFECT	Freeze / Mirror / D-Zoom / NEG.IMAGE					
Communication	RS - 485[Baud Rate : 2400 ~ 57600]					
ENVIROMENTAL						
Temperature	Operating: 14°F to 131°F (-10°c to 55°C) Storage: -4°F to 140°F (-20°C to 60°C)					
IP Rating	IP68	N/A	N/A	N/A	IP68	IP68
Operating Humidty	10% -85% RH					
ELECTRICAL						
Power Supply	12 VDC					
Power Consumption	Less than 150mA					
PHYSICAL						
Dimensions		2.3" x 3.9" x 2.5" [6cm x 10cm x 6.5cm]	Ø5.5" x 4.3"(H) [Ø14cm x 11cm(H)]		Ø5.1" x 4.7"(H) [Ø13cm x 12cm(H)]	
Unit Weight		0.75 lb (0.340 kg)	0.85 lb (0.385 kg)		1.90 lb (0.861 kg)	
Shipping Weight		0.95 lb (0.430 kg)	1.10 lb (0.498 kg)		2.15 lb (0.975 kg)	

- 2MS-HD

- 2MB-HDAR2L212

- 2MD-HDL212

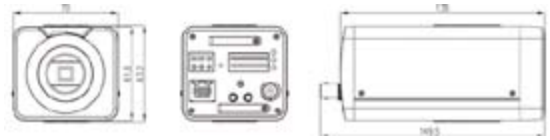
- 2MD-HDIR30L212

- 2MV-HDIR30L212

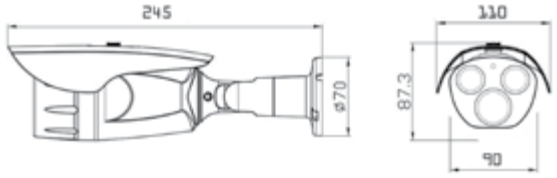
- 2MV-HDL212

- 2MS-HD

Dimensions

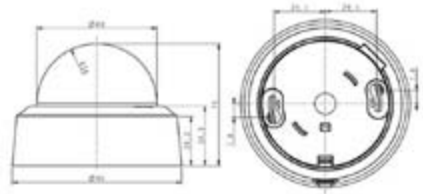


- 2MB-HDAR2L212



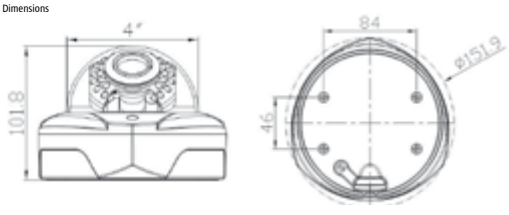
- 2MD-HDL212
- 2MD-HDIR30L212

Dimensions



- 2MV-HDL212
- 2MV-HDIR30L212

Dimensions



HD-SDI 1080p Speed Dome

Features

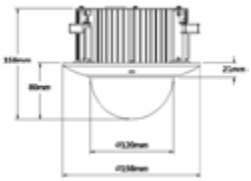
- HD iDVR combines the functions of DVR/HVR/NVR together
- Operating System Embedded LINUX operating system
- Video Output 1ch BNC, 1ch VGA, 1ch HDMI
- 2 USB port for mouse, backup and upgrade
- Recording bit/frame adjustable
- Support PTZ(RS485)/Alarm(4ch)
- Support 4ch auido in / 1ch audio output
- Support CMS and IE browser
- Support 2 pcs 2TB SATA HDD or 1DVD and 1HHD SATA
- Support Symbian,Windows Mobile,Blackberry ,Android,and iPhone APP

Specifications

MODEL	**2MP-7036XWE**	**2MP-7036XWDR**	**2MP-70IR36XW**
CAMERA			
Image Sensor	1/3" Exmor CMOS		
Effective Pixels	1944(H) x 1092(V), 2 Megapixels		
Scanning System	Progressive		
Electronic Shutter Speed	1/1 ~ 1/10,000s	1/1 ~ 1/30,000s	
Min. Illumination	Color: 0.5 lux@F1.6 B/W: 0.095 lux@F1.6	Color: 0.05Lux@F1.6, B/W: 0.005Lux@F1.6	
S/N Ratio	More than 50dB		
HD-SDI Video Output	1ch HD-SDI high -definition video (SMPTE 292M standard)		
CAMERA FEATURES			
Day / Night	Auto(ICR) / Color / B/W		
Backlight Compensation	BLC / HLC / WDR	BLC / HLC / DWDR (Digital WDR)	
White Balance	Auto, ATW, Indoor, Outdoor, Manual		
Gain Control	Auto / Manual		
Noise Reduction	2D/3D		
Privacy Masking	Up to 24 areas		
Digital Zoom	16x		
LENS			
Focal Length	4.7mm ~ 94.0mm(20x Optical zoom)	4.3mm ~ 129mm (30x Optical zoom	
Max Aperture	F1.6~ F3.5	F1.6~ F5.0	
Focus Control	Auto/Manual		
Angle of View	H: 58.2° ~ 2.9°	H: 65.1°~ 2.34°	
Close Focus Distance	10mm ~ 800mm	10mm ~ 1200mm	
PTZ			
Pan/Tilt Range	Pan: 0° ~ 360° endless; Tilt: -2° ~ 90°, auto flip 180°		
Manual Control Speed	Pan: 0.1° ~ 300°/s; Tilt: 0.1° ~250°/s		Pan: 0.1° ~ 300°/s; Tilt: 0.1° ~120°/s
Preset Speed	Pan: 400°/s; Tilt: 300°/s		Pan: 240°/s; Tilt:200°/s
Preset	80(DH-SD), 255(Pelco-P/D)		
PTZ Mode	5 Pattern, 8 Tour, Auto Pan, Auto Scan		
Speed Setup	Human-oriented focal length/ speed adaptation		
Power up in Action	Auto restore to previous PTZ and lens status after power failure		
Idle Motion	Activate Preset/Pan/Scan/Tour/Pattern if there is no command in the specified period		
Time Task	Auto activation of Preset/Pan/Scan/Tour/Pattern by preset-time		
Protocol	DH-SD, Pelco-P/D (Auto recognition)		
IR Distance	N/A		150m (2 near IR LED+ 8 far IR LED
AUXILIARY INTERFACE			
RS485	1 port		
GENERAL			
Power Supply	AC 24V/3A (±10%) /		
Power Consumption	12W, 25W(Heater on)		20W, 43W (IR on, Heater on)
Working Environment	-40℃ ~ 60℃ / Less than 90% RH		
Ingress Protection	IK10 (optional)		N/A
Vandal Resistance	IP67		IP66
Dimensions	222(mm) x 322 (mm)		252(mm) x 384.3(mm)
Weight	5Kg		6.75Kg

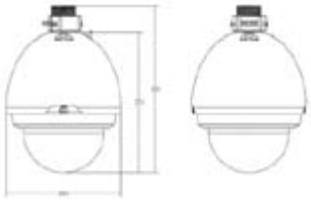
- 2MP-7023XC

Dimensions



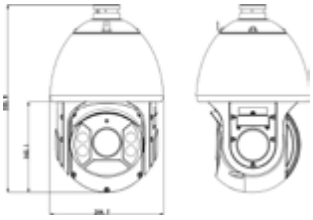
- 2MP-7036XWE
- 2MP-7036XWDR

Dimensions



- 2MP-70IR36XW
- 2MP-70IR36XWDR

Dimensions



Recommended Accessories

Corner Bracket

Wall Surface Bracket

Pole Mount Bracket

Wall Mount Bracket

Ceilingmount Bracket

1080p HCVI Cameras

Features

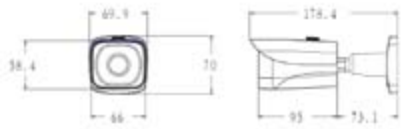
- 2Megapixel CMOS
- 25/30fps@1080P, 25/30/50/60fps@720P
- High speed, long distance real-time transmission
- Full HD and standard definition switch
- control over coaxial cable
- Day/Night(ICR), Auto White Balance, Auto Gain Control, Back Light Compensation, 3D-DNR
- IR for fixed Camera LEDs length 20m, Smart IR
- IP66, DC12V&24VAC

Specifications

MODEL	**2MB-HCVIIR20**	**2MV-HCVIR20**	**2MP-HCV23XW**	**2MP-HCVIR36XW**	**2MP-HCV36X**
CAMERA					
Image Sensor	1/3" 2Megapixel CMOS		1/3" Exmor CMOS	1/3" Exmor CMOS	
Effective Pixels	1920(H)×1080(V)		1280(H) x 960(V)		
Horizontal Resolution	1/3" Exmor CMOS		1/3" Exmor CMOS		
Scanning System	N/A				≥700TVL
Electronic Shutter	1/3s~1/100,000s		1/1 ~ 1/30,000s		
Video Frame Rate	1920*1080@25fps; 1920*1080@30fps; 1280*720@25 fps; 1280*720@30 fps; 1280*720@50 fps; 1280*720@60 fps		N/A		
Synchronization	Internal		N/A		
Min Illumination	0.05Lux@F1.2(AGC ON), 0Lux IR on		Color: 0.05Lux@F1.4; B/W: 0.005Lux@F1.4	Color: 0.05Lux@F1.4; B/W: 0.005Lux@F1.4; 0Lux (IR on)	Color: 0.05 Lux/F1.6, B/W: 0.005Lux/F1.6
S/N Ratio	N/A		More than 50dB		More than 55dB
Resolution	N/A				25/30/50/60fps @ fps720P
Video Output	1-channel BNC HDCVI high definition video output/ CVBS standard definition video output (Can switch)		1-channel BNC HDCVI high definition video output		
CAMERA FEAUTRES					
Max. IR LEDs Length	20m, Smart IR		N/A	N/A	N/A
Day/Night	Auto(ICR) / Color / B/W				
Noise Reduction	2D/3D				
Backlight Compensation	N/A		BLC / HLC / DWDR (Digital WDR)		
White Balance	N/A		Auto, ATW, Indoor, Outdoor, Manual		
Gain Control	N/A		Auto / Manual		
Privacy Masking	N/A		Up to 24 areas		N/A
Digital Zoom	N/A		N/A	16X	16X
OSD Menu	Support		N/A		
LENS					
Focal Length	6mm fixed lens (2.8mm, 3.6mm, 8mm optional)	3.6mm (2.8mm, 6mm, 8mm optional)	4.7mm~94mm(20x Optical zoom)		5.1 mm~61.2mm (12x Optical zoom)
Mount Type	M12		N/A		
Max Aperture	N/A		F1.4 ~ F2.6		F1.2~ F2.1
Focus Control	N/A		Auto / Manual		
Angle of View	N/A		H: 54.1° ~ 3.2°		51.3° ~ 4.64°
Close Focus Distance	N/A		100mm~ 1000mm		
PTZ					
Manual Control Speed	N/A		Pan: 0° ~ 360° endless; Tilt: -2° ~ 90°, auto flip 180°	Pan: 0° ~ 360° endless; Tilt: -15° ~ 90°, auto flip 180°	Pan: 0° ~ 360° endless; Tilt: -2° ~ 90°, auto flip 180°
Manual Control Speed	N/A		Pan: 0.1° ~300°/s; Tilt: 0.1° ~250°/s	Pan: 0.1° ~160°/s; Tilt: 0.1° ~120°/s	Pan: 0.1° ~ 300°/s; Tilt: 0.1° ~120°/s
Preset Speed	N/A		Pan: 400°/s; Tilt: 300°/s	Pan: 240°/s; Tilt: 200°/s	Pan: 300°/s; Tilt:200°/s
Preset	N/A		80(DH-SD), 255(Pelco-P/D)		
PTZ Mode	N/A		5 Pattern, 8 Tour, Auto Pan, Auto Scan		
Speed Setup	N/A		Human-oriented focal length/ speed adaptation		
Power up Action	N/A		Auto restore to previous PTZ and lens status after power failure		
Idle Motion	N/A		Activate Preset/ Pan/ Scan/ Tour/ Pattern if there is no command in the specified period		
Protocol	N/A		DH-SD, Pelco-P/D (Auto recognition)		
AUDIO					
Interface	N/A		1 channel In		
Auxiliary Interface					
RS485	N/A		1		
Alarm	N/A		2/1 channel In/Out		
GENERAL					
Power Supply	DC12V±10%		AC 24V/2.2A (±10%)		AC24V/1.5A (±10%)
Power Consumption	Max 4.5W		9.5W, 21W (Heater on)	10.5W, 26W (IR on, Heater on)	10W
Working Environment	-30°C~+60°C / Less than 95%RH (no condensation)		-40°C ~ 60°C / Less than 90% RH		-10°C ~ 60°C / Less than 90% RH
Transmission Distance	Over 300m via 75-3 coaxial cable		N/A	N/A	N/A
Ingress Protection	IP66				
Protection	N/A		IK10	N/A	N/A
Dimensions(W×D×H)	178.4mm × 69.9mm× 70.0mm	94.0mm x 98mm	222(mm) x 322(mm)	204.7(mm) x 335.9(mm)	198mm×158mm
Weight	0.5Kg	0.33Kg	7.5kg	7.5kg	2.0Kg

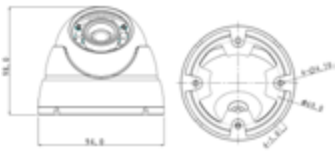
- 2MB-HCVIIR20

Dimensions



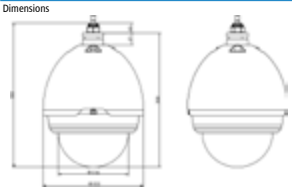
- 2MV-HCVIR20

Dimensions



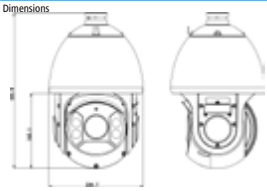
- 2MP-HCV23XW

Dimensions



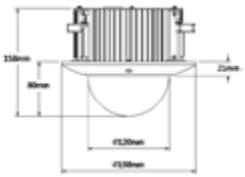
- 2MP-HCVIR36XW

Dimensions



- 2MP-HCV36X

Dimensions



Recommended Accessories

Corner Bracket

Wall Surface Bracket

Pole Mount Bracket

Wall Mount Bracket

Ceilingmount Bracket

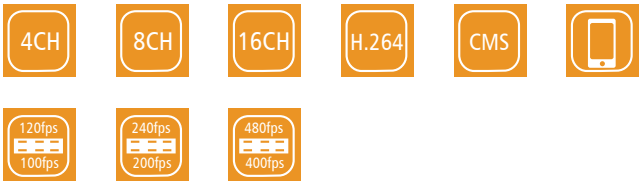
HCVI Digital Video Recorder

Features

- Tribrid: Each channel supports HDCVI/Analog/IP Video input
- 1HDMI/VGA/TV simultaneous video output,1 HDMI separate output
- Up to 1080p realtime live view
- H.264 dual-stream video compression
- 4/8 channel synchronous realtime playback, GRID interface & smart search
- Support Multi-brand Network Cameras
- Support 4 SATA HDDs up to 16TB, 1 eSATA up to 16TB,3 USB2.0
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS

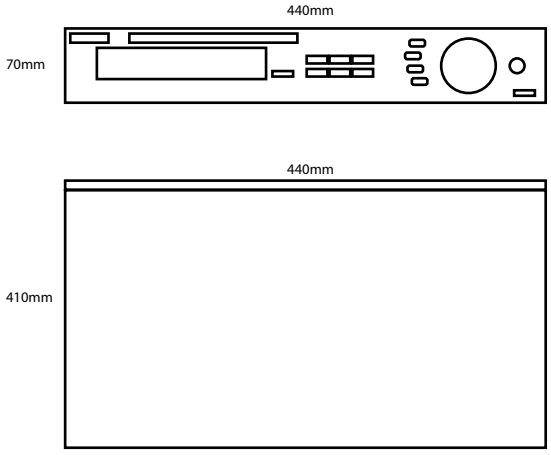
Specifications

MODEL			2M-HCV7404L	2M-HCV7408L	2M-HCV7416L
System	Main Processor		Embedded Processor		
	Operating System		Embedded LINUX		
Video	Input		4 Channel	8 Channel	16 Channel
	Video Standard	HDCVI	1080P/720P HDCVI Camera		
		Analog	NTSC(525Line, 60f/s), PAL(625Line, 50f/s),Effio 960H Camera		
		IP	1080P/720P/D1/CIF IP Camera		
Audio	Input		4 channel, BNC		
	Ouput		1 channel, BNC		
	Two-way talk		1 channel input,1channel output, BNC		
Display	Interface		2 HDMI,1 VGA,1 TV		
	Resolution		1920× 1080, 1280× 1024, 1280× 720, 1024× 768, 800× 600		
	Display Split		1/4	1/4/8/9	1/4/8/9/16
	Privacy Masking		4 rectangular zones (each camera)		
	OSD		Camera title, Time, Video loss, Camera lock, Motion detection, Recording		
Recording	Video/Audio Compression		H.264/G.711		
	Resolution		1080P(1920× 1080)/720P(1280× 720)/960H(960× 576/960× 480)/D1/4CIF(704× 576/704× 480)/CIF(352× 288/352× 240)/QCIF(176× 144/176× 120)		
	Record Rate	Main Stream	1080P/720P/960H/D1/HD1/2CIF/CIF(1～25/30fps)		
		Extra Stream	CIF/QCIF(1～25/30fps)		
	Bit Rate		48～8192Kb/s		
	Record Mode		Manual, Schedule(Regular(Continuous), MD), Stop		
	Record Interval		1～120 min (default: 60 min), Pre-record: 1～30 sec, Post-record: 10～300 sec		
	Trigger Events		Recording, PTZ, Tour, Video Push, Email, FTP, Spot, Buzzer & Screen tips		
	Video Detection		Motion Detection, MD Zones: 396(22× 18), Video Loss & Camera Blank		
	Alarm Input		4 channel	8 channel	16 channel
	Relay Output		6 channel		
Playback & Backup	Sync Playback		1/4	1/4/9	1/4/9/16
	Search Mode		Time/Date, MD & Exact search (accurate to second)		
	Playback Functions		Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom		
	Backup Mode		USB Device/eSATA Device/Internal SATA burner/Network		
Network	Ethernet		RJ-45 port (10/100M/1000M)		
	Network Functions		HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter		
	Max. User Access		128 users		
	Smart Phone		iPhone, iPad, Android, Windows Phone		
Storage	Internal HDD		4 SATA ports, up to 16TB		
	External HDD		1 eSATA port, up to 16TB		
Auxiliary Interface	USB Interface		3 ports(2 Rear),USB2.0		
	RS232		1 port, For PC communication & Keyboard		
	RS485		1 port RS485 for PTZ control,1 port RS422 for Keyboard		
General	Power Supply		AC 100～240 V, 50/60 Hz		
	Power Consumption		40W(without HDD)		
	Working Environment		-10°C～+55°C / 10%～90%RH / 86～106kpa		
	Dimension(W×D× H)		1.5U, 440mm× 410mm×70mm		
	Weight		6KG(without HDD)		



Dimensions

Dimensions



Available on the Android App Store

Available on the App Store

Included

- Remote
- External Power Supply
- Rack Mount Holder
- Software & User Manual
- Hard Drive (Optional)
- DVD Drive (Optional)

Design Diagram - Page 23

Video Matrix Switcher

Features

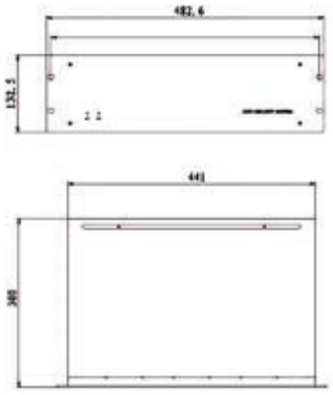
- Microprocessor-Based, Full Cross-Point Video Matrix
- Single Node CPU Systems Control up to 256 Cameras and 32 Monitors
- Expand Beyond 512 Cameras Using Network Nodes
- 1 RS-485 COM Port, 1 RS-422 Port and 1 RJ45 Port
- Logical Camera Selection
- Priority Level Operation
- Built-in Video Loss Detection
- Built-in System Diagnostics
- Built-in Web Server Supports Online Setting and Upgrade
- Factory Tested Prepackaged Systems
- Remote Viewing and Control over TCP/IP Networks Using 2M Network Video Server
- Responds up to 512 Alarms
- Redundant Power Supplies

Specifications

MODEL	2MM-3216M	2MM-6416M
VIDEO		
Video Input	32	64
Video Output	32	
Input Impedance	75 .1Vp-p	
Output Impedance	75 .1Vp-p	
Video Bandwidth	10MHz	
Channel Isolation Degree	>50dB	
Signal to Noise Ratio	>55dB	
POWER		
Power Supply	220V/110V	
Operating Temperature	18W	
CONNECTORS		
Connector Type	BNC	
RS-485 Port	1	
RS-422 Port	1	
RJ45 Port	1	
GENERAL		
Dimensions	440mmx330mmx133mm	
Operating Temperature	-10°C ~ +50°C	
Operating Humidity	90%	
Unit Weight	8KG	
Shipping Weight	17KG	

• 2MM-16M Series

Dimensions



Unique Features

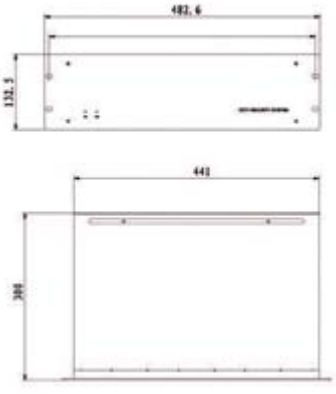
- Microprocessor-Based, Full Cross-Point Video Matrix
- Single Node CPU Systems Control up to 256 Cameras and 32 Monitors
- Expand Beyond 512 Cameras Using Network Nodes
- 1 RS-485 COM Port, 1 RS-422 Port and 1 RJ45 Port
- Logical Camera Selection
- Priority Level Operation
- Built-in Video Loss Detection
- Built-in System Diagnostics
- Built-in Web Server Supports Online Setting and Upgrade
- Factory Tested Prepackaged Systems
- Remote Viewing and Control over TCP/IP Networks Using 2M Network Video Server
- Responds up to 4096 Alarms
- Redundant Power Supplies

Specifications

MODEL	2MM-12816L	2MM-16016L
VIDEO		
Video Input	128	160
Video Output	32	
Input Impedance	75 .1Vp-p	
Output Impedance	75 .1Vp-p	
Video Bandwidth	10MHz	
Channel Isolation Degree	>50dB	
Signal to Noise Ratio	>55dB	
POWER		
Power Supply	220V/110V	
Power Consumption	50W	
CONNECTORS		
Connector Type	BNC	
RS-485 Port	1	
RS-422 Port	1	
RJ45 Port	1	
GENERAL		
Dimensions	440mmx300mmx310mm	
Operating Temperature	-10°C ~ +50°C	
Operating Humidity	90%	
Unit Weight	15KG	
Shipping Weight	28KG	

• 2MM-16M Series

Dimensions



IONVISION Hybrid DVR's

Features

- Supports Up to 64 Channels Real-Time Preview & Recording on One PC
- With Advanced H.264 Technology, Experience 40% Higher Image Quality and Over 60% of Savings on Recording Storage Space
- Supports Dual-Stream Compression
- Supports the following resolution: PAL: 4CIF (704 x 576), DCIF (528 x 384), 2CIF (704 x 288), CIF (352 x 288), QCIF (176 x 144) NTSC: 4CIF (704 x 480), DCIF (528 x 320), 2CIF (704 x 240), CIF (352 x 240), QCIF (176 x 120)
- Each video channel can be compressed independently in 25 F/S (PAL) or 30 F/S (NTSC). Both variable bit-rate and variable frame rate are supported.
- Each audio channel can be compressed independently, using an OggVorbis audio standard. The output bit-rate is 16Kbps.
- The Output Video and Audio Streams are Integrated to Generate the Synchronized H.264 Stream. Video and Audio Coincide with Each Other From Beginning to End When the Stream is played back.

Specifications

MODEL	**2MRM-ION16**	**2MRM-ION32**	**2MRM-ION48**	**2MRM-ION64**
Channel	16	32	48	64
Video Format	NTSC/PAL			
Video Input	1.0Vp-p / 75Ω, BNC x 4	1.0Vp-p / 75Ω, BNC x 8	1.0Vp-p / 75Ω, BNC x 16	1.0Vp-p / 75Ω, BNC x 32
Audio Input	16	32	48	64
Audio Interface	BNC (Vp-p = 2.0V, SNR > 83DB, Linear Electrical Level, 1000Ω)			
DSP Model	TMS320DM645			
Encode DSP Number	4	16	24	32
Preview Resolution	704 x 576 (PAL), 704 x 480 (NTSC)			
Video Compression	H.264, Support CBR, VBR; Frame Rate: 25F/S (PAL), 30F/S (NTSC) Output: 32kbps - 1000kbps (CIF) or 70kbps - 2000kbps (4CIF)			
Compression Resolution	4CIF: 704 x 576 (PAL), 704 x 480 (NTSC) DCIF: 528 x 384 (PAL), 528 x 320 (NTSC) 2CIF: 704 x 288 (PAL), 704 x 240 (NTSC) CIF: 352 x 288(PAL), 352x 240(NTSC) QCIF: 176 x 144 (PAL), 176 x 120 (NTSC)			
Audio Compression	Ogg Vorbis, Sample Ratio is 16Khz, Output Ratio is 16Kbps			
Power Consumption	< 3.5W	< 7W	< 22W	< 67W
Working Temperature	-10°C ~ +50°C			
Working Humidity	10% ~ 90%			
Dimensions	178mm (H) x 445mm (W) x 508mm (D)			

IONVISION Rack Mount Server

Unique Features

- H.264 compression MPEG4 selected per channel
- Up to 16,000 Gigabyte of storage
- Optional DVD video recorder
- Up to 704 x 480 / 704 x 576 NTSC / PAL resolution
- HDD Storage Manager for disk optimization
- Remote desktop VIA IE browser or client software
- TCP/IP based network, LAN, PSTN, ISDN
- Remote desktop setting, display control, relay output, P/T/Z camera
- Remote screen 1, 4, 9, 16, 32 channel split screens
- Selectable recording option per camera
- Selectable video compression recording per camera
- Integrated with ATM/Point of Sale system for image text overlay
- Remote control the P/T/Z camera, just as if you were at the local DVR
- Continuous, motion, alarm, instant, and scheduled recording
- Channel independent resolution, quality, and frame rate settings
- CE and FCC Certified
- UL Listed

Specifications

MODEL	**2MRM**		
VIDEO			
Input	NTSC / PAL Composite		
Output	NTSC / PAL, VGA (1024 x 768), 60 Hz Capacities for NTSC, 50 Hz Capacities for PAL		
Spot Monitor	RCA Composite		
Video Encoding	H.264 MPEG4 / Part 10, MPEG4, MJPEG Per Channel		
Video Inputs	4 Analog Inputs	16 Analog Inputs	32 Analog Inputs
RECORDING RESOLUTION			
NTSC	D1, 4CIF (704 x 480) 2CIF (704 x 240) CIF (352 x 240)		
PAL	D1, 4CIF (704 x 576) 2CIF (704 x 288) CIF (352 x 288)		
Video Display Rate	30 Frames Per Second		
Video Display Modes (Main)	1, 4, 6, 9, 10, 13, 16, 25, 36		
Video Display Modes (Spot)	Channel Sequential		
Frame Rate	NTSC: 1/16 ~ 30 FPS	PAL: 1/16 ~ 25 FPS	
OPTIONAL AUDIO MODELS			
Audio Decoding	G.722		
Audio Input	16 Channels		
Audio Output	16 Channels		
Sampling Ratio	8 Khz		
Encoding Output Bit Rate	16 Kbps		
Video Connectors	4 Female BNC 75 Ohms Inputs	16 Female BNC 75 Ohms Inputs	32 Female BNC 75 Ohms Inputs
Optional Loop Thru			

MODEL	**2MRM**
INTERFACES	
Network Port	Ethernet Port 10M / 100M, RJ45
Serial Port	RS-232 Port
Optional Alarm	16 Alarm Inputs, 4 Relay Outputs
Monitor Ports	VGA, RCA Spot Monitor Output 75 Ohm
Interface Ports	USB 2.0
Recording Optional Audio	Input 16 x 3.5mm Monaural Jacks Ouput 16 x 3.5mm Monaural Jacks
System Audio	Microphone in, and audio output
STORAGE	
Internal Storage	Up to 8 SATA Hard Disks, 500 GB Included
Recording Modes	Manually, Scheduled, Alarm, Motion Detection
Image Encryption	Watermark Technology
Image Authentication	Software Included
NETOWORK CAPABILITIES	
Protocols	IP, TCP, UDP, PPoE, DHCP, PPP
ELECTRICAL	
Input Voltage	Selectable Switch AC 100-240V 50/60 Hz
Power Consumption	400W
Power of Protection	Power On Self Recovery
PHYSICAL	
Dimensions	482.6 x 177.8 x 528.4mm
Material of Main	1.2mm SECC Zinc-Coated Steel
Chassis	Removable and Washable

Design Diagram
Analog System

Wireless Router

Analog Cameras
BNC
VGA
HDMI
Network
Power Outlet
Power Supply
PTZ Control
Speakers
Mic
Mouse (Included)
Coaxial Cable

2MDVR-6004T-H
4 CH System
Cam1 Cam2 Cam3 Cam4
Power Supply

2MDVR-6008T-EL
8 CH System
Cam1 Cam2 Cam3 Cam4 Cam5 Cam6 Cam7 Cam8
Power Supply

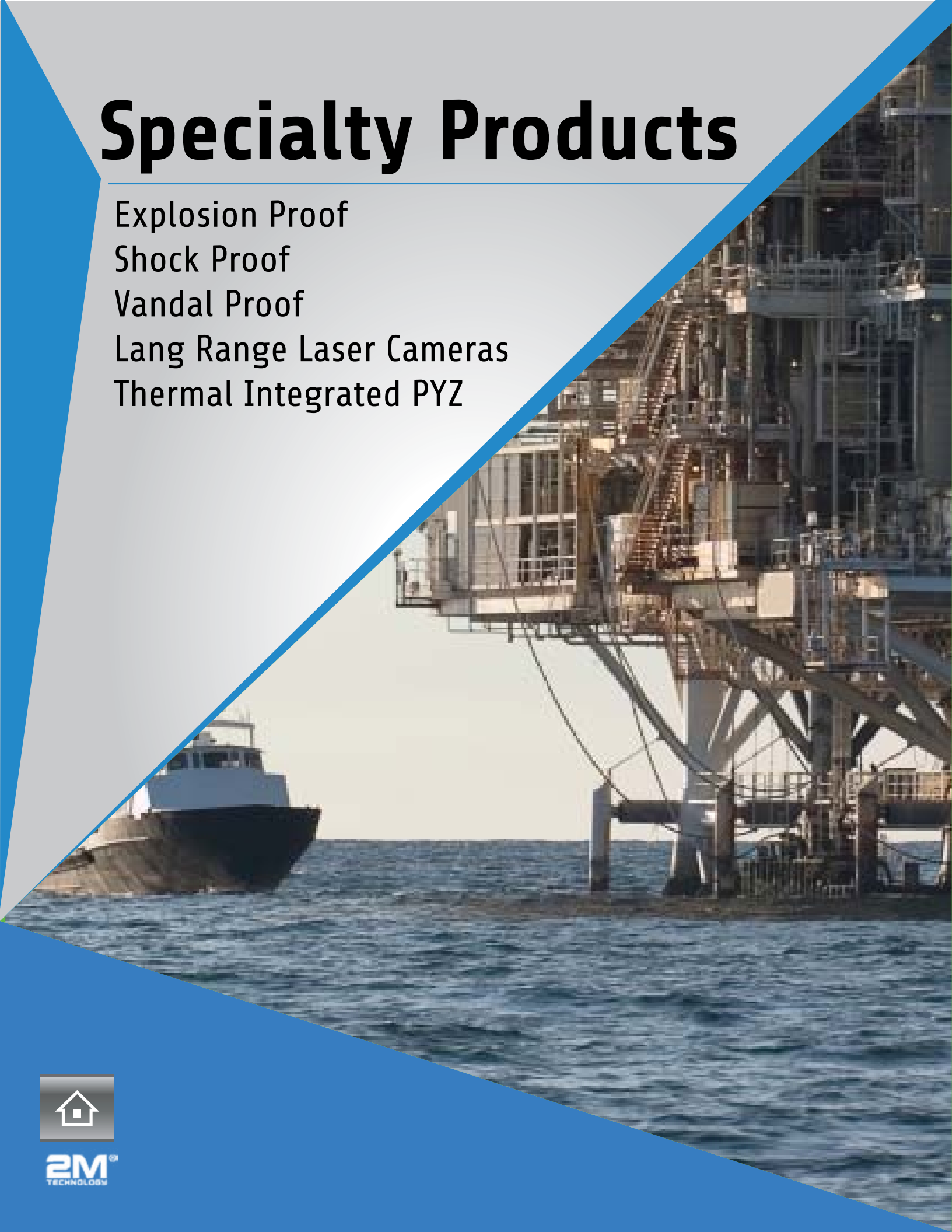
2MDVR-6016T-STL
16 CH System
Cam1 Cam2 Cam3 Cam4 Cam5 Cam6 Cam7 Cam8 Cam9 Cam10 Cam11 Cam12 Cam13 Cam14 Cam15 Cam16
Power Supply

Analog Cameras
- 2MS-70
- 2MB-70AR2L212
- 2MD-70L212
- 2MD-70IR21L212
- 2MV-70L212
- 2MV-70IR30L212
- Analog PTZ

• Diagrams are for illustrative purposes only

Specialty Products

Explosion Proof
Shock Proof
Vandal Proof
Lang Range Laser Cameras
Thermal Integrated PYZ



2M TECHNOLOGY

Explosion Proof, Shock Proof, Vandal Proof, Long Range Laser Cameras

Features

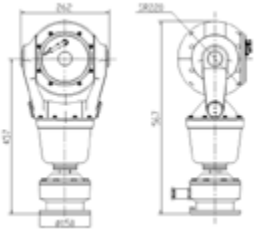
- Sony 36x D/N module
- Wiper
- Compatible Pelco P/D
- Mounted Bracket
- IR Lamps (100M at 0 Lux) (some models)
- The ball is made from aluminum alloy (thickness: 5mm-15mm)
- 360° Continuos Pan Rotation
- 125° Tilt Rotation
- Meet CE, RoHS and FCC Standards

Specifications

MODEL	2M-EX36DN	2M-WR36DN 2M-WR36DN/IR	2M-VP36DN 2M-VP36DN/IR
	Explosion Proof PTZ	Shock Proof Integrated High Speed Dome	Vandal Proof Shock Proof PTZ
ELECTRICAL			
Power	24VAC	AC18V/3.1A	24VAC
	AC24V/2A	14VAC-18VAC/18VDC-24VDC	AC24V/2.7A
Heat Up and Defrost	Control by Temperature Sensor		
Operation Temperature	-40°~+55°C		
PAN / TILT			
Pan Speed	0.1° - 90° /sec Manual Control		
Tilt Speed	0.1° - 40° /sec Manual Control		
PRESET TARGET SPEED			
Pan Speed	90°/sec		
Tilt Speed	40°/sec		
Pan Running	360° Continous Pan Rotation		
Tilt Running	125° Continous Tilt Rotation		
Preset Tour	4 Preset tours, dwell time can be set Auto/ Random/Preset Tour Routes	8 Preset tours, dwell time can be set	4 Preset tours, dwell time can be set Auto/ Random/Preset Tour Routes
Auto Scan Speed		Can be set to 1° -40°/s	
Three scan modes	Auto/Random/Preset Tour Routes		
CAMERA/LENS PARAMETER			
Optical Zoom	36X		
Digital Zoom	12X		
Signal System	PAL/NTSC		
CCD	2:1 Interlacing Scan		
Effective Pixel	752(H) x 582(V)	795(H) x 596(V)	752(H) x 582(V)
Horizontal Resolution	>540TVL	>540TVL	
Lens Focus	F1.4 (f=3.4 - 122.4mm)		
Horizontal Angle	3.4mm Wide Angle 57.8°119mm Narrow Angle 1.7°		
Focus Ctrl	Auto / Manual First		
Min Illumination	0.01 Lux	1/50 sec shutter / speed (Color) 1.4 Lux 1/3 sec Shutter / Speed (Color) 0.1 Lux	0.05Lux
Sync System	Inner/Outer Sync	Built-in Sync / AC Linear Lock	Inner/Outer Sync
Shutter Speed	1/2 ~ 1/10,000s	Auto, 1/4 - 1/10,000	1/2 ~ 1/10,000s
Iris Control	Auto/Manual First		
Gain Control		Auto/Manual	
Video Output	1.0±0.2 Vp-p (75Ω, Complex)		
S/N Ratio	>50dB		
White Balance	Auto / Manual	Auto / Manual	
Water Resistance	IP67		

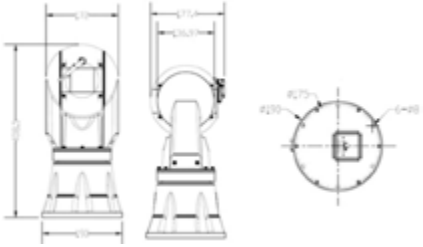
2M-EX36DN — Explosion Proof PTZ

Dimensions



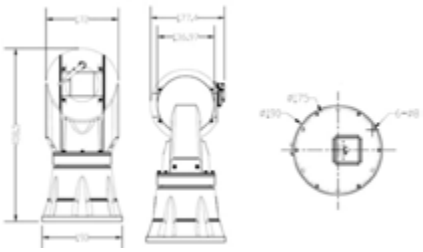
2M-WR36DN / 2M-WR36DN/IR — Shock Proof High Speed Dome

Dimensions

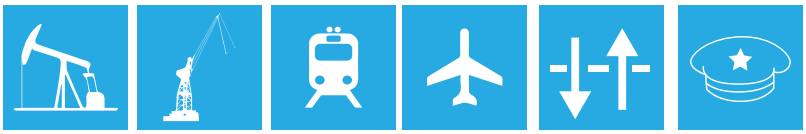


2M-VP36DN / 2M-VP36DN/IR — Vandal Proof Shock Proof PTZ

Dimensions



Applications



- Oil Fields
- Harbour
- Railways
- Airports
- Border
- Military

Thermal Integrated PTZ

Features

- SONY EX-VIEW Super Low Illuminating
- Night Vision Distance 2000m, 6600m or 14400m (vehicle)
- Night Vision Distance 800m, 2400m or 5040m (people)
- 36x
- 360° Continuos Horizontal Rotating
- 90° ~ -90° Tilt Range
- 128 Pre-setting points
- 6 Tracking paths
- 30s Self Checking
- Keep Watching Function
- PELCO D/P protocol control
- OSD Menu
- Easy to Operate

Specifications

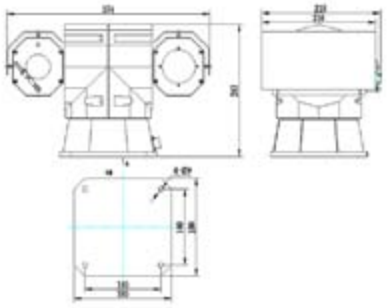
MODEL		2M-TR3650DN		
Distance	Visible Camera	3m~2000m		
	IR Camera	Object	Human (1.8m x 0.5m)	Vehicle (2.3m x 2.3m)
		Detect	2800m	8000m
		Recognize	700m	2000m
		Identify	350m	1000m
Visible Camera	Sensor	1/4"EXview HAD CCD		
	Effective Pixel	About 440,000		
	Horizontal Resolution	530TVL (color); 570TVL (black/white)		
	Focal Length	3.4~122.4 mm, 36x optical zoom		
	F Number	F1.6~F4.5		
	Horizontal Field View	57.8°(wide) ~ 1.7°(tele)		
	Lux	1.4Lux/F1.6		
IR Camera	Focal length	25~100mm, 4x continuous zoom		
	FOV	6.2°×5.0°~24.6°×19.8°		
	MRAD	0.17 ~ 0.68mrad		
	Lens Control	Electronic zoom, electronic focus (auto focus function is optional)		
Detector	Type	Uncooled focal plane infrared Vox detector		
	Effective Pixel	640×512		
	Spectrum Range	7.5~14μm		
	NETD	≤50mK@F1.0,300K		
	Frame Frequency	25Hz		
	Non-uniformity correction	Manual/auto/background correction		
	Image Process	DDE, pseudo color		
Pan-Tilt	Pan	360°		
	Tilt	-45°~+45°		
	Pan speed	0°~30°/s		
	Tilt Speed	0°~20°/s		
	Preset Position	128, support zoom &focus position		
	Preset accuracy	±0.2°		
	Auto Cruise	8 route, each with 10 preset position		
	Line Scan	1		
	Communication	RS485		
	Protocol	Pelco-D, Pelco-P(optional)		
	Baud Rate	2400/4800/9600/19200 bps(optional)		
Interface	Power	DC24V/DC12V		
	Other	RS485, 2×BNC video output		
Environment	Operation Temperature	-40°C~+50°C		
	Storage	-60°C~+70°C		
	Protection	IP66		
	Anti-vibration	Mil-Std-810F		
	Anti-impact	IEC 60068-2-27		
	Anti-salt fog	PH6.5~7.2, spay48 hours		
Power		DC12V/DC24V		
	Total	≤60W		
Physical	Weight	≤15.5kg		
	Size	516.5×240×310mm		

		2M-TR36100DN
Day Camera	Scan Method	Progressive scan
	Zoom	36x optical zoom
	Sensor	1/4" Exview HAD CCD
	Valid Pixels	440000
	Zoom Methods	Auto/manual
	Focal length	f=3.4~122.4mm
	S/N	≥50db
	Video Output	VBS:1.0Vp-p, Y/C output
	Min. Illumination	0.01Lx
	Shutter	1/1~1/10000s
	Sync Sys	Internal sync or external sync
	Back Light Compensation	ON/OFF
Pan-Tilt	Tilt speed	0°~30°/s
	Pan speed	0°~22°/s
	Presets	128
	Scan speed	1 °/s
	Cruise function	2 paths
Thermal Imager	Detect	5,040m (human), 14,400m (vehicle)
	Recognize	1,560m (human), 3,900m (vehicle)
	Identify	880m (human), 1,950m (vehicle)
	Sensor	Uncooled infrared focal plane detector (vox)
	Valid pixels	640×480
	Wave length	8~14μm
	NETD	≤50mK@F1.0,300K
	Focal length	36~180mm
	FOV	3.5°×2.6°~17.2°×12.9°
	Lens control	Electronic zoom, Electronic focus
Parameters	Camera	Integrated CCD cam
	Thermal Imager	Uncooled infrared focal plane detector (vox)
	Power Supply	DC24V±10% Iin≥2.5A
	Interface	RS485 video output, DC24V
Technical indicators	Power consumption	≤30W
	Weight	15.5Kg
	Size	516.5×240×310mm
	MTBF	≥10000hrs
Environment indicators	Working temperature	-25°C~60°C
	Storage Temperature	-40°C~85°C
	Anti-Vibration	150m/s 2 11ms
	Salt-fog proof	Continuously spray fog for 48 hours under PH6.5-7.2

		2M-TR36180DN
Infrared Camera	Resolution	324×256 pixel
	Spectrum Scope	8~14μm
	Temperature Sensitivity	(NETD)50mK
	Lens	50mm, F1.0 GE lens, FOV 13.8°×11.6°
	Imaging Procesor	AGC, DDE, electronic scanning; PAL compound video output
Vis-ible Light Camera	Valid Pixel	440,000
	Min Illumination	0.1Lux
	Optical Zoom	36x
	Digital Zoom	12x (totally 432x)
	Lens	f=3.4~122.4mm, F1.6~F4.5; FOV 1.7°~57.8°
Integrated Pan-Tilt	Angle	360°horizontally rotate
	Tilt	-90°~+90°
	Presets	128
	Tracking	6
	Self Check	30x
	OSD	Yes
	Operation Temperature	-25°C~65°C
	Humidity	<90%
	Anti-impact	150m/s², 11ms
	Anti-saltfog	Continuously spraying 48hours under PH of 6.5~7.2
	Power supply	AC24V/DC12V, 2.5A
	Weight	6.5Kg
Environment	IP Rating	IP66
	Operation Temperature	-40°C~50°C
	Storage Temperature	-60°C~70°C
	Anti-vibration	Mil-Std-810F
	Anti-impact	IEC 60068-2-27
	Anti-Salt fog	PH6.5~7.2, spay48 hours

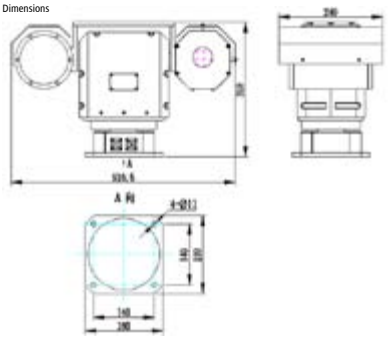
2M-TR36180DN

Dimensions



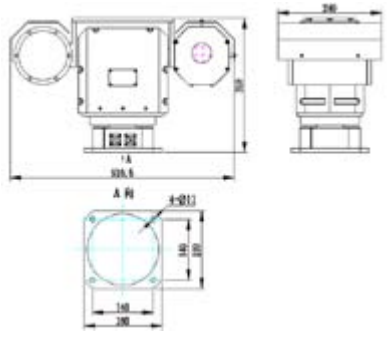
2M-TR36100DN

Dimensions

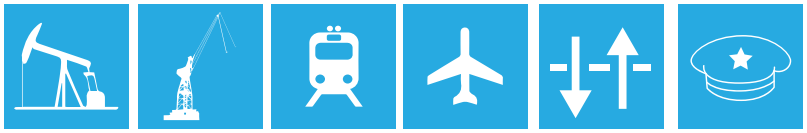


2M-TR3650DN

Dimensions

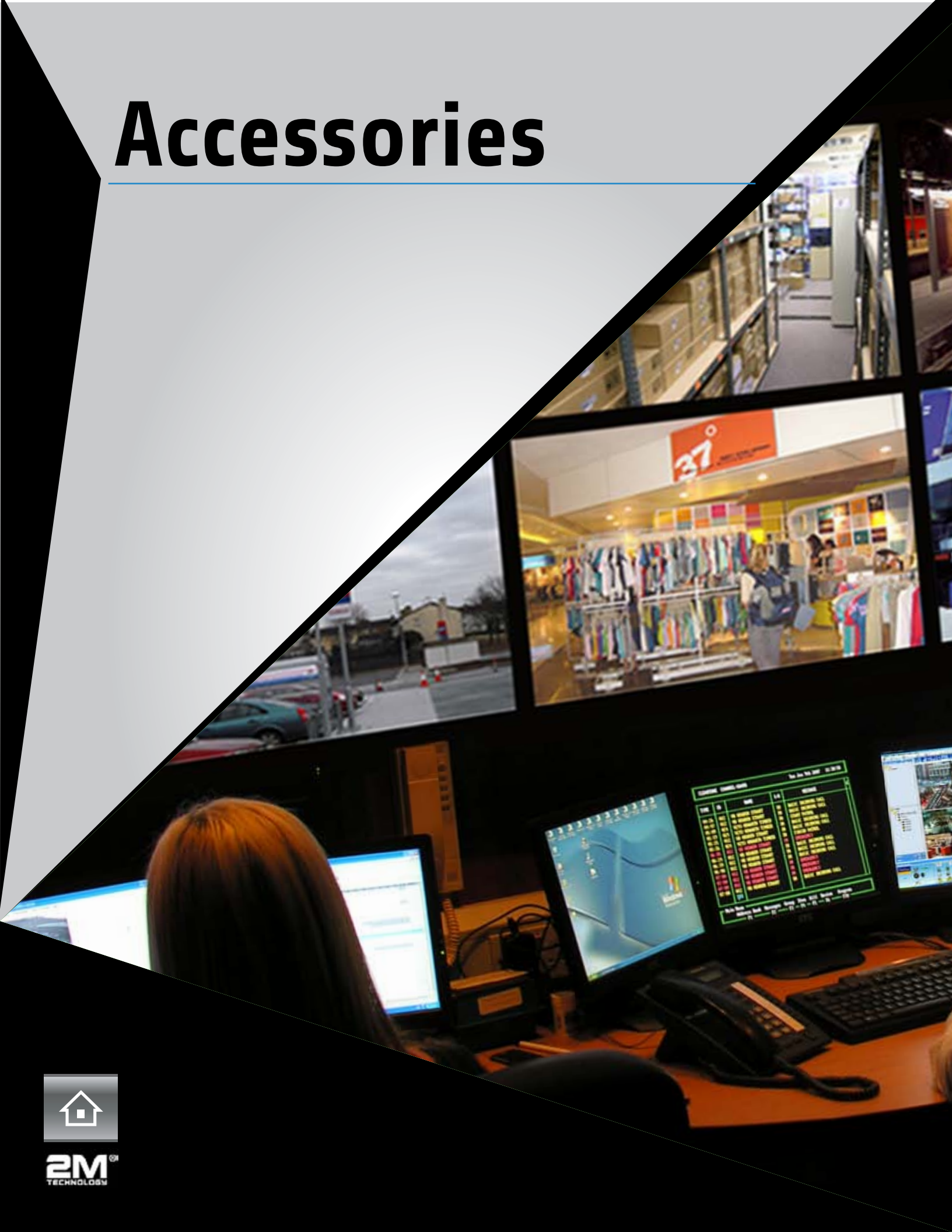


Applications



- Oil Fields
- Harbour
- Railways
- Airports
- Border
- Military

Accessories



2M TECHNOLOGY

Network & Dome Keyboard

Features

- Keyboard to Control
- 2M Technology High Speed Dome (all models)
- 2M Technology Standalone DVR (2MK-D1000 & 2MK-N1000 only)
- 2M Technology Network High Speed Dome (2MK-N1000 only)
- Network Video Server (2MK-N1000 only)
- Connection
- 2MK-N1000: RS485, RS422, USB, RS232 & Network
- 2MK-D1000: RS485, RS422, USB & RS232
- Three Dimensional Joystick Control of PTZ Functions
- Preset Position, Auto Scan, Auto Pan, Auto Tour & Pattern Control
- Auxiliary Functions
- On-Screen Menu & User Operation Procedure Tips
- Connect to SmartPSS via USB (2MK-N1000 only)

Specifications

MODEL	**2MK-N1000**	**2MK-D1000**
GENERAL		
Keyboard Keypanel	Electromechanical	
Joystick	3-axis, vector-solving, with twisting, return to-center head	
Keyboard Connector	RJ-45,RS232,RS485,RS422,USB	RS232,RS485,RS422
Keyboard Communication	Direct Mode, Network Mode	Direct Mode
Direct Mode	Interface: RS232/RS485 DVR Protocol: DH2 Dome Protocol: DH-SD/PELCO-D/PELCO-P/PELCO-D1/PELCO-P1	
Network Mode	Interface: RJ45 DVR/Network Dome: IP Address/Port/Protocol	N/A
Display	LCD, 75.2mm x 33.85mm	
ENVIRONMENTAL		
Power Supply	Power adapter, input 100V～240V 50Hz / 60Hz,output DC12V/1000mA	
Power Consumption	5W	
Operation Temperature	-10° ～ 55℃	
Working Humidity	10% ～ 90%	
Atmosphere Pressure	86kpa～106kpa	
Dimension	330mmx160(140)mmx37.5(21)mm (W× D×H) (height: 100mm including joystick)	
Weight	2.5KG	

Dimensions

Dimensions

3 Axis Network Matrix Controller

Features

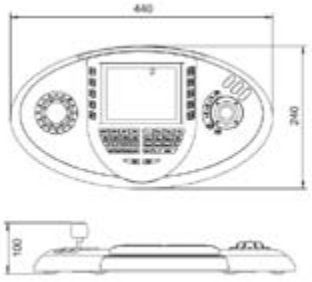
- Keyboard to Control:
- High Speed Dome
- Network High Speed Dome
- Standalone DVR
- Central Management Platform
- 3-Axis joystick for PTZ control
- Password protection, support multiple user authority
- High Resolution Large LCD, Operate pattern tour, crusing track and presets by OSD menu
- RS485 & Network Connections
- Preset Position, Auto Scan, Auto Pan, Auto Tour & Pattern Control

Specifications

Specifications	**2MK-N1000**
GENERAL	
Protocol	Pelco-P, Pelco-D
Baud	2400bps, 4800bps, 9600bps, 19200bps
Keyboard Communication	RS485, RS232, RJ45, USB
Transmission Distance	1200m
Maximum cable length	1200m
Power Supply	DC 12V
Power Consumption	5W
Dimension	440mmx240mmx100mm
Working Temperature	-10° ～ 55℃
Working Humidity	10% ～ 90%
Unit Weight	4KG
Shipping Weight	6Kg

Dimensions

Dimensions



CCTV Monitors

Features

- 15", 19", 22", 32", and 42" TFT-LCD CCTV Monitor
- Designed for continuos 24/7 operation
- Resolution up to 1920 x 1080 (22", 32" and 42")
- Contrast Ratio of 1000:1, 5000:1 and 8000:1

Specifications

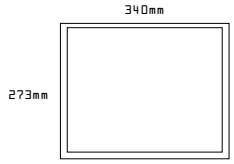
MODEL	2M-LCD17	2M-LCD19
Screen Size	17"	19"
Active Display Area (mm)	340mm(W) x 273mm(H)	376mm(W) x 301.6mm(H)
Colors	16.7 Million Colors	
Contrast Rate	500:1 (Typical) Brightness: 300 Cd/m²	800:1 (Typical) Brightness: 300 Cd/m²
LCD Type	TFT-LCD	
Resolution	1280(H) x 1024(V)	
Response Time	12ms	8ms
TV Lines	NTSC 600 Lines, PAL 800 Lines NTSC / PAL Automated Switch	
Video System	PAL/NTSC/SECAM	
Connector	1*VGA, 1*BNC (In + Out), 1*Audio, 1*S-Video	VGA+2*BNC (In + Out) + HDMI + Audio + S-Video
Wall Mount	Optional	

MODEL	2M-LCD22	2M-LCD32	2M-LCD42
Screen Size	22"	32"	42"
Active Display Area (mm)	476mm(W) x 268mm(H)	698.4mm (W) x 392.85mm (H)	930.2mm(W) x 523.0mm(H)
Display Mode	16:9		
LCD Type	TFT-LCD		
Resolution	1920x1080		
Display Color	16.7M		
Pixel Pitch (mm)	0.248(H)×0.248(V)	0.12125 (H) x 0.36375 (V)	0.4845(H) x 0.4845(V)
Brightness (nits)	1000 cd/m²		
Contrast Ratio	1000:1	5000:1	3000:1
Viewing Angle	178(H) / 178(V)		
V-FREQUENCY	60Hz		
Response Time	5ms	8ms	6ms
Backlight	LED	CCFL	LED
INPUT/OUTPUT			
Composite Video Input	2	3 (BNCx3)	
Y,Pb,Pr/Y,Cb,Cr input	1 (BNCx3)		
RS232 input/output	RJ45X2		
VGA input	1		
HDMI input	1		
Composite Video Output	1 (BNCx1)	2 (BNCx2)	
VIDEO			
System	PAL/NTSC/SECAM		
3D Comb Filter	Yes		
Video Comb Filter	Yes		
MENU	English		
POWER			
Power Input	DC 12V/4A	AC100V~240V, 50/60Hz	
Max in Operation	≤45W (Max)	≤115W	
Standby power loss	<3W	<5W	

PAL NTSC SECAM

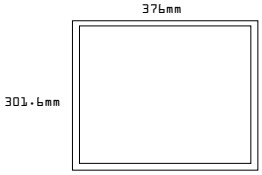
• 2M-LCD17

Dimensions



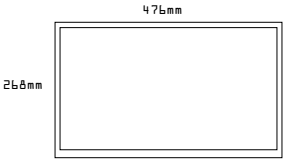
• 2M-LCD19

Dimensions



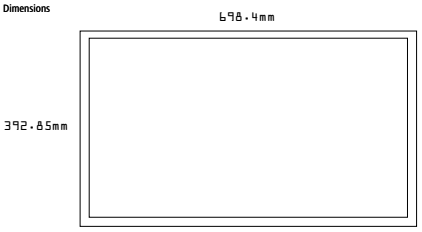
• 2M-LCD22

Dimensions



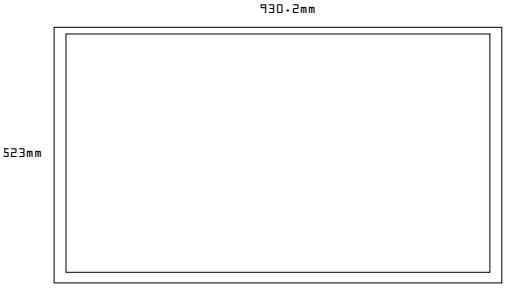
• 2M-LCD32

Dimensions



• 2M-LCD42

Dimensions



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